

CASE 3354: Application of SHELL  
OIL CO. for approval of the NORTH  
ANTELOPE RIDGE UNIT AGREEMENT.

ASE NO.  
3354

Application,  
Transcripts,  
Small Exhibits  
ETC.

MAIL TO:  
N.M.O.C.C.

MAIN OFFICE

17 JUN 1 PM 1 20

MAY 26 1967

Shell Oil Company  
Post Office Box 1500  
Midland, Texas 79701

Gentlemen:

On May 24, 1967, effective as of April 1, 1967, Arthur A. Baker, Acting Director of the Geological Survey, approved the termination of the North Antelope Ridge lease agreement, Lea County, New Mexico, No. 14-08-0001-0751, pursuant to the last paragraph of section 20 thereof.

Enclosed is one copy of the approved application for your records. We request that you furnish notice of this approval to each interested working interest owner, lessee, and lessor at their last known address.

Sincerely yours,

RUSSELL G. WAYLAND

For the Director

Enclosure

cc:

Roswell 2 (w/2 copies approved application)

Copy to Hobbs.  
+ N Mex/Land Comm.  
+ N.M.O.C.C.

NOTED  
MAY 29 1967  
SHOOK

RECEIVED  
MAY 29 1967  
U. S. GEOLOGICAL SURVEY  
ROSWELL, NEW MEXICO

State of New Mexico



Commissioner of Public Lands

GUYTON B. HAYS  
COMMISSIONER



March 28, 1967

P. O. BOX 1148  
SANTA FE, NEW MEXICO

Shell Oil Company  
P. O. Box 1509  
Midland, Texas, 79704

Re: North Antelope Ridge Unit  
Lea County, New Mexico  
TERMINATION

ATTENTION: Mr. A. C. Wheat

Gentlemen:

The Commissioner of Public Lands has received by your letter of March 21, 1967, approval by Shell and Superior for the termination of North Antelope Ridge Unit, Lea County, New Mexico. Termination is provided for and agreed to in accordance with Section 20 of the North Antelope Ridge Unit.

The Commissioner approves the termination as of this date, subject to like approval by the United States Geological Survey and Oil Conservation Commission. You will note the effective date has not been filled in on the Certificates, please advise us as soon as this date has been determined by the United States Geological Survey.

We are enclosing three (3) copies of our Certificates of Termination.

Your Official Receipt will be mailed to you as soon as it is issued.

Very truly yours,

GUYTON B. HAYS  
COMMISSIONER OF PUBLIC LANDS

BY:  
Ted Bilberry, Director  
Oil and Gas Department

Shell Oil Company  
March 28, 1967  
Page 2.

cc: United States Geological Survey  
Roswell, New Mexico

New Mexico Oil Conservation Commission ✓  
Santa Fe, New Mexico

C  
O  
P  
Y



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Denver 1957  
Roswell, New Mexico 88201

August 17, 1966

Shell Oil Company  
P. O. Box 1509  
Midland, Texas 79706

Attention: Mr. A. C. Wheat

Gentlemen:

Your letter of August 11, received on August 15, transmits ratifications and joinders to the North Anaslope Ridge unit agreement No. 14-08-0001-B751, Lea County, New Mexico, executed by the following persons:

<u>Reported Basic Royalty Owner</u>	<u>Fee Land Unit Tract No.</u>
Richard J. Moran, Independent Executor of the Estate of W. J. Moran, Deceased and as trustee for Mary Moran Carnes and Betty Moran Rice	18, 19, 24, 25, 26, 27, and 32
Norden Corporation Limited	19, 22, 23, 25, 26, 27, 32, and 33
Rosa Loyce and James Graham	21

Section 29 of the unit agreement required that such ratifications and joinders be filed with the Commissioner of Public Lands, State of New Mexico, and the New Mexico Oil Conservation Commission. Subject to compliance with the foregoing requirements, the above described ratifications and joinders are considered effective as of September 1, 1966.

Copies of the ratifications and joinders are being distributed to the appropriate Federal offices.

Sincerely yours,

(Orig. Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil and Gas Supervisor

cc:  
Washington (w/cy joinders)  
BLM - Santa Fe (w/cy joinders)

Hobbs (w/cy joinders)  
Com. of Pub. Lands - Santa Fe (ltr. only)  
NMOCC - Santa Fe (ltr. only) ✓

5284  
MAIN OFFICE 070

266 AUG 19 PM 1 15

2084  
MAIN OFFICE 000

Drawer 1857  
Roswell, New Mexico 88201

APR 14 AM 8 17

April 13, 1966

Shell Oil Company  
P. O. Box 1509  
Midland, Texas 79704

Attention: Mr. Lee Ferris

Gentlemen:

Your letter of April 7, received on April 11, transmits ratifications and joinders to the North Antelope Ridge unit agreement, No. 14-08-0001-8751, Lea County, New Mexico, by the following persons:

Reported Basic Royalty Owner

Lea Land Unit Tract No.

Dorothy Heard

18 and 19

Bonnie Dolores Barron Burroughs,  
W. G. Burroughs, A. M. Routh, and  
Marjorie Ann Routh

21

Hugh Ward, Rufus Sanders Ward,  
Joseph Ward Gibbs, and Jessie Ward  
Roberts

25

Lois S. Horton and Lee V. Horton

26

Ruth Marion, Tom B. Marion,  
Ora Mae Davis, George E. Davis,  
Annis B. Hollis, W. E. Hollis,  
J. H. Madlin, Jr., Marietta Madlin,  
Elbert E. Madlin, Grace Madlin, and  
Berulah Baird

27

Albert H. Elliott, Individually and  
as Attorney-in-Fact for Minnie May  
Elliott

28

31  
B. A. Christmas, Jr., Individually  
and as Trustee for B. A. Christmas, Sr.,  
Joyce ~~Christmas~~ Brown and Joyce Ann Brown

32  
J. L. Burke, Jr., and Joyce Burke

Section 29 of the unit agreement requires that such ratifications and joinders be filed with the State Land Commissioner and the New Mexico Oil Conservation Commission. Subject to compliance with such requirement, the above described ratifications and joinders are considered effective as of May 1, 1966.

Copies of the ratifications and joinders are being distributed to the appropriate Federal offices.

Sincerely yours,

(002.Sgd.) CARL C. TRAYWICK

CARL C. TRAYWICK  
Acting Oil & Gas Supervisor

cc:  
Washington (w/cy joinders)  
BLM - Santa Fe (w/cy joinders)  
Hobbs (w/cy joinders)  
N. Mex. Com. of Pub. Lands - Santa Fe  
N.M.O.C.C. - Santa Fe ✓



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1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
December 14, 1965

EXAMINER      HEARING

IN THE MATTER OF:

Application of Shell Oil Company for a unit  
agreement, Lea County, New Mexico.  
Applicant, in the above-styled cause, seeks  
approval of the North Antelope Ridge Unit  
Area comprising 4,480 acres, more or less,  
of Federal, State and Fee lands in  
Township 23 South, Range 34 East, Lea  
County, New Mexico.

Case No. 3354

BEFORE:      Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Application of Shell Oil Company for a unit agreement.

MR. MORRIS: If the Examiner, please. I'm Richard Morris of Seth, Montgomery, Federici and Andrews of Santa Fe, New Mexico, appearing for Shell Oil Company in this case. We will have two witnesses: Mr. Clark who will testify with respect to land matters and Mr. Stoesz who will testify with respect to the prospect. I ask that they both stand and be sworn.

(Witnesses sworn.)

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

\*\*\*

ROBERT A. CLARK, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Clark, will you state name, where you live, by whom you are employed and in what capacity?

A My name is Robert A. Clark. I'm employed by the Shell Oil Company and I reside in Midland, Texas. I am manager of Shell's Midland Base, Western Division, Land Department.

Q Have you previously testified before the Commission or one of its examiners?

A I have not.

Q Would you briefly outline your education and your experience in the oil industry?

A I have a Bachelor of Science degree in Business Administration from Washington University in St. Louis in 1947. I have a Bachelor in Foreign Trade from the American Institute for Foreign Trade in Phoenix, Arizona, in '48. Outside the industry, but I spent two years with the National Bank of Boston until '50 and then joined Shell in the beginning of '51 and for the last fourteen and a half years I have been in the Shell Land Department in the Midland area.

Q Are you familiar with Shell's application in this case?

A I am.

MR. MORRIS: Are the witness' qualifications acceptable?

MR. UTZ: Yes, they are.

Q (By Mr. Morris) Have you participated in the formation and the signup of the North Antelope Ridge Unit?

A I have. I have personally participated starting in January and since the middle of the Summer I have handled the thing myself.

Q What type of unit is proposed in this North Antelope Ridge Area?

A We are proposing an exploratory type standard Federal unit and it contains State, Federal and fee acreage.

Q Now if you will refer, Mr. Clark, to the Shell's Exhibit Number 1 in this case and turn to Exhibit A which is the plat attached to that Exhibit Number 1, will you point out the pertinent features of that Exhibit A?

A Well, the exhibit marks down which is the Federal, which is the State and which is the fee land by hashed marks and also gives the number of acres and percentage of each type of land involved and also, of course, is the unit outline and the sections involved in our proposed unit.

Q Will you, just so it will show in the record, give the number of acres and the percentages for Federal, State and fee lands?

A Yes, sir. There are 1280 acres of Federal lands, comprising 28.57 per cent of the unit; 2520 acres of State lands comprising 56.25 per cent; and 680 acres of fee lands comprising 15.18. Exhibit A shows the various tract numbers which are keyed over to ownership as shown in Exhibit B?

Q Of the unit agreement?

A That is correct.

Q If you would refer to Exhibit B, would you state who the working interest owners are in this unit are and the status of their commitment to the unit at this time?

A What you would consider the normal, I will explain a bit in detail in a moment. The normal working interest owners are: Southern Unit Production Company, A. E. Fogleson, Gail D. Fogleson, Gulf Oil Corporation, Shell Oil Company, George A. Conger, Jr., T. C. Sanders, Jr., the Superior Oil Company and Skelly Oil Company. Now I say, what we would normally consider, you will note Section 12 in the unit area is a fee section that is very badly split up. Superior has all but 500 and all of that 56 acres at lease at this time. There are actively trying to bring in the rest of it now. Should they be unable to lease this in the final analyses we shall invite those people to participate if they want. I don't anticipate any of them will. They own two or three acres apiece and they will be asked.

Q In other words, if the owners of lease interests are not signed up by Superior, they will be asked to join both as to their what you consider their working interests and also their royalty?

A Yes, they will be sent copies of both the operating agreement, the unit agreement and asked to ratify and join the rest of us in the drilling of the well.

Q Now what is the status of the other working interests at the present time?

A All have either ratified -- All have ratified and one

party sent a telegram stating that they would ratify with the exception of 320 acres belonging to A. E. Fogleson, Gail D. Fogleson and Southern Union Production and we are unable to persuade them to join the unit.

Q Now, that would be Tract Number 1 --

A Tract Number 1.

Q -- which would be the northeast quarter and the southwest quarter of Section 15?

A That is correct.

Q And they have indicated they would not join?

A I have letters stating they will not join.

Q Just approximately what percentage of the working interests is presently committed?

A Ninety-one and a half per cent approximately and there will be more come in from these other people as they are leased. They anticipate they will be down essentially to only the seven per cent plus that is owned by Southern Union and that will be the only outstanding in the final count.

Q Are there owners of overriding royalty interests within the unit area?

A They are and they are being asked to join. In fact, I have ratification from one party and I know for a fact that all but one have been asked and I presume he has, I just don't know but we had three, Gulf had one and Superior had one and

we have contacted ours and have one ratification back a copy of their request for joinder so I know what they've done and I'm not sure as to the status of the one mineral owner under the Superior tract which would be Tract 5 but they will be asked.

Q The working interests owners are handling and seeking the joinder of the overriding royalty interests that exist within their respective tracts?

A Yes, sir, that is correct.

Q Now, with respect to the royalty interest, you said earlier that you had Federal, State and fee lands involved. What is the status of your negotiations with the Federal government?

A The Federal government has issued us their letter officially designating this as a logical area and agreed to join.

Q Of the U.S.G.S.?

A By the U.S.G.S. and a letter from the B.L.M. in Washington.

Q What is the status of your negotiations with the State of New Mexico?

A The Land Office has given us preliminary approval. They have in their possession a copy of our agreement and they are looking it over now as to form and context. Mrs Ray asked

me to drop by, as a matter of fact, this afternoon before I leave for any comments she might have as to the form.

Q Now to some extent, you have already covered the situation with respect to the fee tracts, leaseholds, in Section 12. Are there other fee lands in the area?

A There is one other 40-acre tract in Section 23 which belongs to Merchant Livestock Company which Shell owns leasehold state.

Q You are referring to Tract 17?

A Tract 17, yes, sir. We will actively pursue their joinder and Superior is at the present time. They are in the process of sending out requests for joinder of all the royalty interests in Section 12.

Q Then do I understand that each working interest owner, overriding royalty interest owner and royalty interest owner will be given the opportunity to join in this unit? Is that your intention?

A They will not only be given the opportunity, we will actively pursue their joinder because it is beneficial to our interests to the unit.

MR. UTZ: As I understand it, none of the royalty interest in Section 12 is actually signed yet?

THE WITNESS: Not to my knowledge. Each company is handling its own. If Superior wants to delay just a little



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bit longer than the rest of us in getting final management approval and I got a telegram from them yesterday at the LaFonda stating that they had agreed to it and they were signing and returning by mail so I presume that they would have to wait until yesterday before they could ask others to join since they didn't have approval themselves but I have furnished Superior with forty-five to fifty copies of the unit agreement and they will mail a copy to each royalty owner.

MR. UTZ: So, you have something less than 91.5 per cent royalty signed up?

THE WITNESS: Of the royalty interests, yes, sir.

MR. UTZ: Substantially less, probably.

THE WITNESS: At this very moment I would say "substantially", yes.

Q (By Mr. Morris) The Federal and State lands together comprise almost 85 per cent of your unit area?

A Right.

Q So, you would have at least 85 per cent of the royalty interests?

A We have 85 per cent plus at this time.

Q All right.

A I think that there is a very good case for their joinder and I anticipate that at least those who understand it that they will want to join so I don't anticipate any problems

along those lines.

Q Just to make it completely clear now Mr. Clark as to the situation in Section 12, you have not approached these fee owners in Section 12 for their joinder in the unit at this time because Superior at this time is actively trying to lease these tracts?

A That is correct.

Q Then if Superior is able to lease the tracts, Superior's lease will be committed to the unit and they will attempt to obtain their joinder in the unit by their royalty interests?

A That is correct.

Q If they remain unleased in Section 12 and Superior is not able to obtain the lease then Shell Oil will offer these people insofar as they are known to the best of your ability, it is your intention to offer to each of these unleased interests the opportunity to commit that interest to the unit?

A We shall.

Q All right. Turning to the unit agreement itself, you stated earlier that was a standard Federal form of unit?

A That's right. A standard Federal form for exploratory type units.

Q Under the unit agreement who is named as unit operator?

A Shell is named as the unit operator.

Q What formations are unitized?

A All formations are to be unitized.

Q What will be the initial drilling obligation as specified in the unit agreement?

A We are obligated to drill a 14,800 foot Siluro-Devonian test. Well, I should state it a little differently: We are obligated to drill a Siluro-Devonian test not to exceed 14,800 feet unless production is encountered at a lesser depth.

Q Does the unit agreement contain the standard provisions with respect to non-joinder and subsequent joinder?

A It does.

Q MR. MORRIS: At this time, Mr. Examiner, we offer into evidence Shell's Exhibit Number 1 in this case.

MR. UTZ: Without objection, Exhibit Number 1 will be offered in the record.

(Whereupon, Applicant's Exhibit 1 was offered and admitted into evidence.)

MR. MORRIS: That's all we have on direct of Mr. Clark.

MR. UTZ: You have a geological witness to follow?

MR. MORRIS: Yes.

MR. UTZ: Any other questions of the witness? If not, he may be excused.

(Witness was excused.)

L. W. S T O E S Z, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Stoesz, will you please state your name, where you reside, by whom you are employed and in what capacity?

A I am L. W. Stoesz. I'm employed by Shell Oil Company as Division Exploration Manager for the Western Division at Midland, Texas.

Q Have you previously testified before the Commission or one of its Examiners and had your qualifications made a matter of record?

A Yes, I did and they were.

Q Are you familiar with the application of Shell Oil Company in this case?

A Yes.

Q Where is the North Antelope Ridge Unit Area located with respect to other developments in this area?

A North Antelope Ridge, as proposed, is immediately north of the four-well Pennsylvanian and Siluro-Devonian Antelope Ridge Hills is about two to three miles east of the Pennsylvanian and Devonian Bell Lake Field.

Q What are your prospects in this unit and would you briefly describe the features of the prospect?

A The prospect is a deeply buried anticline detected by seismic mapping. It is a structure with the northward extending Antelope Ridge structure. Seismic mapping indicates about 400 feet of closure and the structure is separated from Antelope Ridge Field to the south by a well-defined syncline and is separated from Bell Lake Field to the west by a deep pronounced syncline.

The objectives are a Siluro-Devonian. The Secondary objectives are the Pennsylvanian.

Q Do you have a statement prepared in written form, Mr. Stoesz, describing the prospect?

A Yes, I do.

Q I hand you what has been marked Applicant's Exhibit Number 2 and ask you if that is the statement that I just referred to ?

A Yes, sir.

Q Was that prepared by you?

A Under my supervision, yes, sir.

Q Mr. Stoesz, in your opinion does the unit area, as proposed, thoroughly cover the structure that you believe to exist in this unit area?

A Yes, it does. The unit outline is determined by the lowest closing structural contour which encompasses all of the significant parts of the seven sections included in the unit.

Q Is there any degree of urgency required, Mr. Stoesz, for the approval of the unit agreement?

A Yes, sir.

Q Would you state what that is?

A We have several operators in the unit. This is an expensive test and they have budgeted their money for this year and all have indicated a desire to commence the test during 1965.

MR. MORRIS: We offer Shell Oil Company's Exhibit Number 2 into evidence.

MR. UTZ: Without objection, Exhibit Number 2 will entered into the record in this Case.

(Whereupon, Applicant's Exhibit 2 was offered and admitted into evidence.)

MR. MORRIS: May we go off the record for just a moment?

MR. UTZ: Yes.

(Whereupon, an off the record discussion was held.)

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Stoesz, I believe your statement said that you were going to drill a well in Section 22 in the questioned unit. Section 22 is in the extreme southeast quarter of this unit so it must not be a very symmetrical unit, is that true?

A You're correct. It is asymmetrical elongate toward the northeast. The highest part of the structure is at the indicated drill site and as we indicated in the report, this is also the area of best seismic data.

Q And as far as the northeast portion of the unit, I would gather that it does flare out in that area?

A Yes, sir.

Q Because of the four section area?

A Yes, sir.

Q Now, is it narrow enough to be included within a northwest and southwest corners of Section 24?

A Section 14 I believe it is.

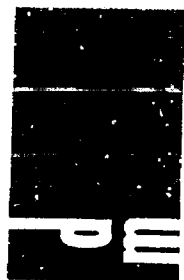
Q In other words, the narrow part of the unit is diagonally northwest, southeast of Section 14?

A Yes. The problem here is steep dip. A part of Section 13, of course, is the east part of Section 13 is low, but we have had to include it in this part of 13 because we have all of 14 because a significant part of it is in the lowest part that we have encountered.

Q And as far as your closing contour is concerned on your seismic picture, it is definitely all within the unit?

A Yes, sir.

MR. UTZ: That pretty well describes it. Any other questions of the witness? The witness may be excused.



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PAGE 16

Are there any further statements in this case?

The case will be taken under advisement.

MR. MORRIS: Thank you.

(Whereupon, Case Number 3354  
was concluded.)



I N D E X

WITNESS	PAGE
ROBERT A. CLARK	
Direct Examination by Mr. Morris	2
L. W. STOESZ	
Direct Examination by Mr. Morris	12
Cross Examination by Mr. Utz	14

E X H I B I T S

<u>Exhibit</u>	<u>Marked for</u> <u>Identification</u>	<u>Offered</u>	<u>Admitted</u>
App's. 1	2	11	11
App's. 2	2	14	14

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STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, DEAN A. ROBINSON, 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 31st day of December, 1965.

*Dean A. Robinson*

NOTARY PUBLIC

My Commission Expires:

October 16, 1969.

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner Hearing of Case No. 3387 heard by me on *January 15* 1965.  
*[Signature]* Examiner  
New Mexico Oil Conservation Commission

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BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
December 14, 1965

EXAMINER HEARING

IN THE MATTER OF:

Application of Shell Oil Company for a unit  
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Township 23, South, Range 34 East, Lea  
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Case No. 3354

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

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(Witnesses sworn.)

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Q Have you previously testified before the Commission or one of its examiners?

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Q Would you briefly outline your education and your experience in the oil industry?

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A What you would consider the normal, I will explain a bit in detail in a moment. The normal working interest owners are: Southern Unit Production Company, A. E. Fogleson, Gail D. Fogleson, Gulf Oil Corporation, Shell Oil Company, George A. Conger, Jr., T. C. Sanders, Jr., the Superior Oil Company and Skelly Oil Company. Now I say, what we would normally consider, you will note Section 12 in the unit area is a fee section that is very badly split up. Superior has all but 500 and all of that 56 acres at lease at this time. There are actively trying to bring in the rest of it now. Should they be unable to lease this in the final analyses we shall invite those people to participate if they want. I don't anticipate any of them will. They own two or three acres apiece and they will be asked.

Q In other words, if the owners of lease interests are not signed up by Superior, they will be asked to join both as to their what you consider their working interests and also their royalty?

A Yes, they will be sent copies of both the operating agreement, the unit agreement and asked to ratify and join the rest of us in the drilling of the well.

Q Now what is the status of the other working interests at the present time?

A All have either ratified -- All have ratified and one

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party sent a telegram stating that they would ratify with the exception of 320 acres belonging to A. E. Fogleson, Gail D. Fogleson and Southern Union Production and we are unable to persuade them to join the unit.

Q Now, that would be Tract Number 1 --

A Tract Number 1.

Q -- which would be the northeast quarter and the southwest quarter of Section 15?

A That is correct.

Q And they have indicated they would not join?

A I have letters stating they will not join.

Q Just approximately what percentage of the working interests is presently committed?

A Ninety-one and a half per cent approximately and there will be more come in from these other people as they are leased. They anticipate they will be down essentially to only the seven per cent plus that is owned by Southern Union and that will be the only outstanding in the final count.

Q Are there owners of overriding royalty interests within the unit area?

A They are and they are being asked to join. In fact, I have ratification from one party and I know for a fact that all but one have been asked and I presume he has, I just don't know but we had three, Gulf had one and Superior had one and



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we have contacted ours and have one ratification back a copy of their request for joinder so I know what they've done and I'm not sure as to the status of the one mineral owner under the Superior tract which would be Tract 5 but they will be asked.

Q The working interests owners are handling and seeking the joinder of the overriding royalty interests that exist within their respective tracts?

A Yes, sir, that is correct.

Q Now, with respect to the royalty interest, you said earlier that you had Federal, State and fee lands involved. What is the status of your negotiations with the Federal government?

A The Federal government has issued us their letter officially designating this as a logical area and agreed to join.

Q Of the U.S.G.S.?

A By the U.S.G.S. and a letter from the B.L.M. in Washington.

Q What is the status of your negotiations with the State of New Mexico?

A The Land Office has given us preliminary approval. They have in their possession a copy of our agreement and they are looking it over now as to form and context. Mrs Ray asked

me to drop by, as a matter of fact, this afternoon before I leave for any comments she might have as to the form.

Q Now to some extent, you have already covered the situation with respect to the fee tracts, leaseholds, in Section 12. Are there other fee lands in the area?

A There is one other 40-acre tract in Section 23 which belongs to Merchant Livestock Company which Shell owns leasehold state.

Q You are referring to Tract 17?

A Tract 17, yes, sir. We will actively pursue their joinder and Superior is at the present time. They are in the process of sending out requests for joinder of all the royalty interests in Section 12.

Q Then do I understand that each working interest owner, overriding royalty interest owner and royalty interest owner will be given the opportunity to join in this unit? Is that your intention?

A They will not only be given the opportunity, we will actively pursue their joinder because it is beneficial to our interests to the unit.

MR. UTZ: As I understand it, none of the royalty interest in Section 12 is actually signed yet?

THE WITNESS: Not to my knowledge. Each company is handling its own. If Superior wants to delay just a little

bit longer than the rest of us in getting final management approval and I got a telegram from them yesterday at the LaFonda stating that they had agreed to it and they were signing and returning by mail so I presume that they would have to wait until yesterday before they could ask others to join since they didn't have approval themselves but I have furnished Superior with forty-five to fifty copies of the unit agreement and they will mail a copy to each royalty owner.

MR. UTZ: So, you have something less than 91.5 per cent royalty signed up?

THE WITNESS: Of the royalty interests, yes, sir.

MR. UTZ: Substantially less, probably.

THE WITNESS: At this very moment I would say "substantially", yes.

Q (By Mr. Morris) The Federal and State lands together comprise almost 85 per cent of your unit area?

A Right.

Q So, you would have at least 85 per cent of the royalty interests?

A We have 85 per cent plus at this time.

Q All right.

A I think that there is a very good case for their joinder and I anticipate that at least those who understand it that they will want to join so I don't anticipate any problems

along those lines.

Q Just to make it completely clear now Mr. Clark as to the situation in Section 12, you have not approached these fee owners in Section 12 for their joinder in the unit at this time because Superior at this time is actively trying to lease these tracts?

A That is correct.

Q Then if Superior is able to lease the tracts, Superior's lease will be committed to the unit and they will attempt to obtain their joinder in the unit by their royalty interests?

A That is correct.

Q If they remain unleased in Section 12 and Superior is not able to obtain the lease then Shell Oil will offer these people insofar as they are known to the best of your ability, it is your intention to offer to each of these unleased interests the opportunity to commit that interest to the unit?

A We shall.

Q All right. Turning to the unit agreement itself, you stated earlier that was a standard Federal form of unit?

A That's right. A standard Federal form for exploratory type units.

Q Under the unit agreement who is named as unit operator?

A Shell is named as the unit operator.

Q What formations are unitized?

A All formations are to be unitized.

Q What will be the initial drilling obligation as specified in the unit agreement?

A We are obligated to drill a 14,800 foot Siluro-Devonian test. Well, I should state it a little differently: We are obligated to drill a Siluro-Devonian test not to exceed 14,800 feet unless production is encountered at a lesser depth.

Q Does the unit agreement contain the standard provisions with respect to non-joinder and subsequent joinder?

A It does.

Q MR. MORRIS: At this time, Mr. Examiner, we offer into evidence Shell's Exhibit Number 1 in this case.

MR. UTZ: Without objection, Exhibit Number 1 will be offered in the record.

(Whereupon, Applicant's Exhibit 1 was offered and admitted into evidence.)

MR. MORRIS: That's all we have on direct of Mr. Clark.

MR. UTZ: You have a geological witness to follow?

MR. MORRIS: Yes.

MR. UTZ: Any other questions of the witness? If not, he may be excused.

(Witness was excused.)

L. W. S T O E S Z, having been first duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. MORRIS:

Q Mr. Stoesz, will you please state your name, where you reside, by whom you are employed and in what capacity?

A I am L. W. Stoesz. I'm employed by Shell Oil Company as Division Exploration Manager for the Western Division at Midland, Texas.

Q Have you previously testified before the Commission or one of its Examiners and had your qualifications made a matter of record?

A Yes, I did and they were.

Q Are you familiar with the application of Shell Oil Company in this case?

A Yes.

Q Where is the North Antelope Ridge Unit Area located with respect to other developments in this area?

A North Antelope Ridge, as proposed, is immediately north of the four-well Pennsylvanian and Siluro-Devonian Antelope Ridge Hills is about two to three miles east of the Pennsylvanian and Devonian Bell Lake Field.

Q What are your prospects in this unit and would you briefly describe the features of the prospect?

A The prospect is a deeply buried anticline detected by seismic mapping. It is a structure with the northward extending Antelope Ridge structure. Seismic mapping indicates about 400 feet of closure and the structure is separated from Antelope Ridge Field to the south by a well-defined syncline and is separated from Bell Lake Field to the west by a deep pronounced syncline.

The objectives are a Siluro-Devonian. The Secondary objectives are the Pennsylvanian.

Q Do you have a statement prepared in written form, Mr. Stoesz, describing the prospect?

A Yes, I do.

Q I hand you what has been marked Applicant's Exhibit Number 2 and ask you if that is the statement that I just referred to ?

A Yes, sir.

Q Was that prepared by you?

A Under my supervision, yes, sir.

Q Mr. Stoesz, in your opinion does the unit area, as proposed, thoroughly cover the structure that you believe to exist in this unit area?

A Yes, it does. The unit outline is determined by the lowest closing structural contour which encompasses all of the significant parts of the seven sections included in the unit.

Q Is there any degree of urgency required, Mr. Stoesz, for the approval of the unit agreement?

A Yes, sir.

Q Would you state what that is?

A We have several operators in the unit. This is an expensive test and they have budgeted their money for this year and all have indicated a desire to commence the test during 1965.

MR. MORRIS: We offer Shell Oil Company's Exhibit Number 2 into evidence.

MR. UTZ: Without objection, Exhibit Number 2 will entered into the record in this Case.

(Whereupon, Applicant's Exhibit 2 was offered and admitted into evidence.)

MR. MORRIS: May we go off the record for just a moment?

MR. UTZ: Yes.

(Whereupon, an off the record discussion was held.)

#### CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Stoesz, I believe your statement said that you were going to drill a well in Section 22 in the questioned unit. Section 22 is in the extreme southeast quarter of this unit so it must not be a very symmetrical unit, is that true?



A You're correct. It is asymmetrical elongate toward the northeast. The highest part of the structure is at the indicated drill site and as we indicated in the report, this is also the area of best seismic data.

Q And as far as the northeast portion of the unit, I would gather that it does flare out in that area?

A Yes, sir.

Q Because of the four section area?

A Yes, sir.

Q Now, is it narrow enough to be included within a northwest and southwest corners of Section 24?

A Section 14 I believe it is.


Q In other words, the narrow part of the unit is diagonally northwest, southeast of Section 14?

A Yes. The problem here is steep dip. A part of Section 13, of course, is the east part of Section 13 is low, but we have had to include it in this part of 13 because we have all of 14 because a significant part of it is in the lowest part that we have encountered.

Q And as far as your closing contour is concerned on your seismic picture, it is definitely all within the unit?

A Yes, sir.

MR. UTZ: That pretty well describes it. Any other questions of the witness? The witness may be excused.

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Are there any further statements in this case?

The case will be taken under advisement.

MR. MORRIS: Thank you.

(Whereupon, Case Number 3354  
was concluded.)

I N D E X

WITNESS	PAGE
ROBERT A. CLARK	
Direct Examination by Mr. Morris	2
L. W. STOESZ	
Direct Examination by Mr. Morris	12
Cross Examination by Mr. Utz	14

E X H I B I T S

<u>Exhibit</u>	<u>Marked for</u> <u>Identification</u>	<u>Offered</u>	<u>Admitted</u>
App's. 1	2	11	11
App's. 2	2	14	14

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STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

I, DEAN A. ROBINSON, 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 31st day of December, 1965.

Dean A. Robinson  
NOTARY PUBLIC

My Commission Expires:  
October 16, 1969.

I do hereby certify that the foregoing is  
a complete record of the proceedings in  
the Bernalillo hearing of Case No. 1965-  
heard by me on 12/31/65.  
Dean A. Robinson Examiner  
New Mexico Oil Conservation Commission

## GEOLOGICAL REPORT - NORTH ANTELOPE RIDGE UNIT

LEA COUNTY, NEW MEXICO

### LOCATION

The proposed North Antelope Ridge Unit is in the northeast Delaware Basin in southern Lea County, New Mexico, immediately northeast of Antelope Ridge (Morrow and Siluro-Devonian) field and 20 miles southwest of Eunice, New Mexico.

### STRUCTURE

Seismic data of good to poor quality indicate a northeast-southwest trending anticline having about 400 feet of closure at about Mississippian level. This culmination is on a northeast trending structural axis extending from Antelope Ridge field. The San Simon Swale (a near-surface depression filled with gravels) traverses northwest-southeast across the center of the unit. Seismic data in this swale are of poor quality; consequently, we have located the initial test on the crest of the structure in Section 22 where data are good. A well defined syncline separates the proposed unit from the Antelope Ridge Unit to the south, and pronounced synclines bound the west, north and east sides. The unit outline is determined by the lowest closing contour which covers all or significant parts of Sections 11, 12, 13, 14, 15, 22 and 23, Township 23-South, Range 34-East, NMPM.

### OBJECTIVES

Principal objectives are Pennsylvanian-Morrow sandstones and Siluro-Devonian dolomite which are productive at Antelope Ridge and Bell Lake fields to the southwest.

### UNITIZED SUBSTANCES

All formations below the surface.

### SUMMARY

We plan to drill a 14,800-foot Siluro-Devonian test in the Southwest 1/4 Northeast 1/4 of Section 22, Township 23-South, Range 34-East, NMPM,

BEFORE EXAMINER UTZ	
OIL CONSERVATION COMMISSION	
<i>40/20</i>	EXHIBIT NO. <u>2</u>
CASE NO.	<u>3354</u>

which will be designated the Unit test. This test is on the crest of the indicated uplift. It is our belief that the proposed Unit embraces that area which will logically be productive of gas on the indicated structure

*FW Stoes*  
Division Exploration Manager

State of New Mexico  
Oil Conservation Commission



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

December 16, 1965

Case No. 3355  
Order No. R-3015 & R-3016  
Applicant:

**SHELL OIL COMPANY**

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

A. L. PORTER, Jr.  
Secretary-Director

Carbon copy of order also sent to:

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. 3354  
Order No. R-3015

APPLICATION OF SHELL OIL COMPANY  
FOR APPROVAL OF THE NORTH ANTELOPE  
RIDGE UNIT AGREEMENT, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on December 14, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Uts.

NOW, on this 16th day of December, 1965, 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, Shell Oil Company, seeks approval of the North Antelope Ridge Unit Agreement covering 4480 acres, more or less, of State, Federal and Fee lands described as follows:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM  
Sections 11 through 15: All  
Sections 22 and 23: All

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.



-2-

CASE No. 3354

Order No. R-3015

IT IS THEREFORE ORDERED:

(1) That the North Antelope Ridge Unit Agreement is hereby approved.

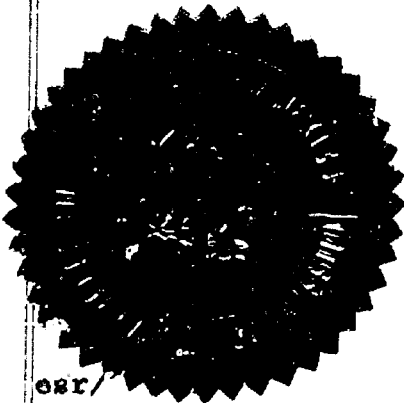
(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(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

*Guston B. Hays*  
GUSTON B. HAYS, Member

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

esr/

DOCKET: EXAMINER HEARING - TUESDAY - DECEMBER 14, 1965

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

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

- CASE 3348: Application of Joseph I. O'Neill, Jr. for special rules for the South Prairie-San Andres Pool, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the South Prairie-San Andres Pool, Roosevelt County, New Mexico, including a provision for 80-acre proration units. Applicant further seeks the extension of said pool to include portions of Sections 16, 17, 20 and 21, Township 8 South, Range 36 East.
- CASE 3349: Application of International Oil & Gas Corporation for a dual completion Lea County, New Mexico. Applicant, in the above-styled cause, seeks the approval of the dual completion (conventional) of its Linam Federal Well No. 1 located in Unit I of Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, to produce oil from the Bone Springs and Wolfcamp formations (both undesignated) through parallel strings of tubing.
- CASE 3350: Application of International Oil & Gas Corporation for the creation of a new oil pool and for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new oil pool for Wolfcamp production in Section 21, Township 18 South, Range 32 East, Lea County, New Mexico, and the establishment of special rules therefor, including a provision for 80-acre proration units.
- CASE 3351: Application of Pan American Petroleum Corporation for special pool rules for the Dos Hermanos Morrow Gas Pool, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of temporary special pool rules for the Dos Hermanos Morrow Gas Pool in Section 28, Township 20 South, Range 30 East, Eddy County, New Mexico, including a provision for 640-acre proration units and fixed well locations.
- CASE 3352: Application of Bass Brothers Enterprises, Inc. for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Custer Mountain Unit Area comprising 2560 acres, more or less, of State land in Township 23 South, Range 35 East, Lea County, New Mexico.
- CASE 3353: Application of Tesoro Petroleum Corporation to amend Order No. R-2807, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks an amendment to Order No. R-2807, which authorized a waterflood project in the Hospah Unit Area, to permit the production of oil from previously designated water injection wells, to approve unorthodox locations for additional producing wells, and to authorize additional injection wells, all in Section 36, Township 18 North, Range 9 West, McKinley County, New Mexico.

December 14, 1965, Examiner Hearing

- ← CASE 3354: Application of Shell Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Antelope Ridge Unit Area comprising 4,480 acres, more or less, of Federal, State, and Fee lands in Township 23 South, Range 34 East, Lea County, New Mexico.
- CASE 3355: Application of Shell Oil Company for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Square Lake Premier Unit Area comprising 1,080 acres, more or less, of Federal, State and Fee lands in Township 16 South, Range 31 East, Eddy County, New Mexico.
- CASE 3356: Application of Shell Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in its North Square Lake Premier Unit Area by the injection of water into the Premier Sand of the Grayburg formation through thirteen wells located in Sections 5, 6, and 8, Township 16 South, Range 31 East, Eddy County, New Mexico.
- CASE 3357: Application of Skelly Oil Company for an oil well-salt water disposal dual completion, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Hobbs "T" Well No. 11, located in Unit P of Section 33, Township 7 South, Range 33 East, Roosevelt County, New Mexico, to produce oil from the Upper San Andres formation, Chaveroo San Andres Pool, and to dispose of produced salt water in the Lower San Andres formation in the interval from approximately 4700 feet to 4780 feet, utilizing parallel strings of tubing.

BEFORE THE OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF THE  
NORTH ANTELOPE RIDGE UNIT AGREEMENT  
LEA COUNTY, NEW MEXICO

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Shell Oil Company, with offices at Midland, Texas, files herewith one copy of a proposed Unit Agreement for the development and operation of the North Antelope Ridge Unit Area, Lea County, New Mexico, and makes application for approval of said Unit Agreement as provided by law, and in support thereof states:

1. That the proposed Unit Area covered by this agreement embraces 4,480.00 acres of land, more or less, more particularly described as follows:

NEW MEXICO PRINCIPAL MERIDIAN

Township 23 South, Range 34 East

Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 22: All  
Section 23: All

Containing 4,480 acres, more or less.

2. That the lands embraced within the proposed unit area contain 1,280 acres of Federal lands, being 28.57% of the area; 2,520 acres of State of New Mexico lands, being 56.25% of the area, and 680 acres of fee or patented lands, being 15.18% of the area.
3. That application is being made for the designation of said unit area and for the approval of the form of Unit Agreement by the Commissioner of Public Lands of the State of New Mexico.
4. That applicant is informed and believes, and upon such information and belief states, that the proposed unit area contains all, or substantially all, of the geological feature involved, and that in the event of the discovery of oil or gas thereon, that said Unit Agreement will permit the producing areas to be developed and operated in the interest of conservation and the prevention of waste of the unitized substances.

5. That Shell Oil Company is designated as the Unit Operator in the Unit Agreement, and as such is given authority under the terms of the agreement to carry on all operations necessary for the development and operation of the unit area for oil and gas, subject to all applicable laws and regulations. That the Unit Agreement provides for the drilling of an initial test well to a depth sufficient to test the Siluro-Devonian formation, but that applicant is not obligated to drill said well, in any event, to a depth in excess of 14,800 feet.

6. That applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, that the field or area can be developed more economically and efficiently under the terms of the Unit Agreement, to the end that the maximum recovery will be obtained of unitized substances, and that the Unit Agreement is in the interest of conservation and prevention of waste as contemplated by the New Mexico Oil Conservation Commission Statutes and Regulations.

7. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof by the Commissioner of Public Lands of the State of New Mexico, and after approval by the United States Department of the Interior, an approved copy will be filed with the New Mexico Oil Conservation Commission.

WHEREFORE, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the approval of the Unit Agreement, and that upon said hearing, said Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interests of conservation and the prevention of waste.

Dated this 17th day of November, 1965.

Respectfully submitted,

SHELL OIL COMPANY

By R. A. Clarke  
R. A. Clarke, Western Division Land  
Manager, Midland, Texas

**EXHIBIT "B"**  
**SCHEDULE SHOWING OWNERSHIP OF ALL LANDS WITHIN**  
**THE NORTH ANTELOPE RIDGE UNIT AREA**  
**LEA COUNTY, NEW MEXICO**

Tract No.	Description	Lease Number	Serial No. & Expiration Date	Basic Royalty Percentage	Lessee of Record and Percentage	Overriding Royalty Percentage	Working Interest and Percentage			
<u>FEDERAL LANDS</u>										
1	T-23-S, R-34-E Sec. 15: NE $\frac{1}{4}$ , SW $\frac{1}{4}$	320	NM-0120919 4/1/71	U.S.A. 12.5%	E. E. Fogelson Gayle D. Fogelson Southern Union Production Company	25% 25% 50%	Bryan Bell (Until \$750 per acre has been paid) L. A. Ross	5%  2.5%	E. E. Fogelson Gayle D. Fogelson Southern Union Production Company	25% 25% 50%
2	T-23-S, R-34-E Sec. 15: NW $\frac{1}{4}$ , SE $\frac{1}{4}$	320	NM-0181157 8/1/71	U.S.A. 12.5%	Gulf Oil Corporation	100%	Laurese L. Horton and Claude E. Horton, Jr.	5%	Gulf Oil Corporation	100%
3	T-23-S, R-34-E Sec. 14: SW $\frac{1}{4}$	160	NM-0195926 10/1/71	U.S.A. 12.5%	Shell Oil Company	100%	H. A. Witz and Sylvia Witz; C. I. Wolfe and Clola M. Wolfe	5%	Shell Oil Company	100%
4	T-23-S, R-34-E Sec. 14: NW $\frac{1}{4}$	160	NM-0500061 12/1/74	U.S.A. 12.5%	Shell Oil Company George H. Bunker, Jr. T. T. Sanders, Jr.	75% 12.5% 12.5%	Cecil Anderson and Mildred Anderson (only under 75% lease of Shell Oil Company)	75% 5% 12.5%	Shell Oil Company George H. Bunker, Jr. T. T. Sanders, Jr.	75% 12.5% 12.5%
5	T-23-S, R-34-E Sec. 22: SE $\frac{1}{2}$	320	NM-0552659 5/1/74	U.S.A. 12.5%	The Superior Oil Company	100%	Sam G. Horne, Jr. (Until \$2,000 per acre has been paid)	5%  100%	The Superior Oil Company	100%

5 Tracts, Federal Lands, 1280 Acres, 28.57% of the Unit Area

Tract No.	Description	Number of Acres	Lease No. and Expiration Date	Basic Royalty & Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
STATE OF NEW MEXICO LANDS							
6	T-23-S, R-34-E Sec. 22: NE $\frac{1}{4}$	160	OG-1529 11-19-67	State 12.5%	Skelly Oil Company	None	Skelly Oil Company 100%
7	T-23-S, R-34-E Sec. 13: NE $\frac{1}{2}$	320	K-2458 5-16-72	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
8	T-23-S, R-34-E Sec. 14: SE $\frac{1}{4}$	160	K-2545 6-19-72	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
9	T-23-S, R-34-E Sec. 11: SE $\frac{1}{4}$ Sec. 14: NE $\frac{1}{4}$	320	K-2876 11-20-72	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
10	T-23-S, R-34-E Sec. 11: S $\frac{1}{2}$ NW $\frac{1}{4}$	80	K-3580 9-17-73	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
11	T-23-S, R-34-E Sec. 22: NW $\frac{1}{4}$	160	K-3595 9-17-73	State 12.5%	The Superior Oil Company	None	The Superior Oil Company 100%
12	T-23-S, R-34-E Sec. 23: NE $\frac{1}{2}$ , SW $\frac{1}{4}$ , NW $\frac{1}{4}$ SE $\frac{1}{4}$ , S $\frac{1}{2}$ SE $\frac{1}{4}$	600	K-3596 9-17-73	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
13	T-23-S, R-34-E Sec. 11: SW $\frac{1}{4}$	160	K-3665 10-15-73	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
14	T-23-S, R-34-E Sec. 13: S $\frac{1}{2}$	320	K-3666 10-15-73	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%
15	T-23-S, R-34-E Sec. 11: NE $\frac{1}{4}$	160	K-3796 12-17-73	State 12.5%	Shell Oil Company	None	Skelly Oil Company 100%
16	T-23-S, R-34-E Sec. 11: NE $\frac{1}{2}$ NW $\frac{1}{4}$	80	K-3797 12-17-73	State 12.5%	Shell Oil Company	None	Shell Oil Company 100%

11 Tracts State Lands, 2520 Acres, 56.25% of the Unit Area

Tract No.	Description	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage		
PATENTED (FEE) LANDS									
17	<u>I-23-S, R-34-E</u> Sec. 23: <u>NE<math>\frac{1}{4}</math> SE<math>\frac{1}{4}</math></u>	40	Lease 1 3-14-69	The Merchant Livestock Company 18.75%	Shell Oil Company	100%	None	Shell Oil Company	100%
18	<u>I-23-S, R-34-E</u> Sec. 12: <u>NE<math>\frac{1}{4}</math> NE<math>\frac{1}{4}</math></u>	40	Lease 1 8-19-70	Weldon E. Page Edna O. Mobley Opal A. Page Roy M. Page 2.34374% 2.34374% 2.34374% 2.34374%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 2 8-26-70	Dorothy Heard 1.17188%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 3 1-26-71	Lois Haskell Straight .07324%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 4 8-31-70	W. J. Moran, et ux 2.27050%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 5 1-24-66	M. W. Coll, et ux 2.34375%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 6 4-26-66	A. R. Hebenstreit 3.51562% <u>18.75000%</u>	The Superior Oil Company	100%	None	The Superior Oil Company	100%
19	<u>I-23-S, R-34-E</u> Sec. 12: <u>NW<math>\frac{1}{4}</math> NE<math>\frac{1}{4}</math></u>	40	Lease 1 9-14-70	Nordon Corporation, Ltd. 1.562500%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 2 8-26-70	Dorothy Heard 1.171876%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 3 1-26-71	Lois Haskell Straight .073243%	The Superior Oil Company	100%	None	The Superior Oil Company	100%
			Lease 4 9-27-70	Kate A. Herwig Luella Collett 1.953126% 1.171876%	The Superior Oil Company	100%	None	The Superior Oil Company	100%



Tract No.	Description	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessees of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
20	T-23-S, R-34-E Sec. 12: S $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	20	Not Leased	J. L. Reed Estate	100%		Not Leased - 100%
21	T-23-S, R-34-E Sec. 12: N $\frac{1}{2}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$	20	Lease 1 10-18-70	Lillie Mae Barron 10.546875%	The Superior Oil Company 100%	None	The Superior Oil Company 65.89285%
			Lease 2 10-18-70	Betty Joyce Holler .904018%	The Superior Oil Company 100%	None	The Superior Oil Company 65.89285%
			Lease 3 10-18-70	Rosa Loyce Graham .904017%	The Superior Oil Company 100%	None	The Superior Oil Company 65.89285%
				12.355083%			
			Not Leased	Anna Mae Yoder	27/560		
			Not Leased	Alma Lee Barron	27/560		
			Not Leased	Dorothy Bell Stone	27/560		
			Not Leased	Bonnie Delores Barron	27/560		
			Not Leased	Minnie Josephine Barron	27/560		
			Not Leased	W. A. Gould	56/560		
					191/560		Not Leased 34.10715%

Tract No.	Description	Acres	No. Lease Serial of No. & Expiration Date	Basic Royalty and Percentage	Overriding		
					Lessee of Record and Percentage	Royalty and Percentage	Working Interest and Percentage
22	T-23-S, R-34-E Sec. 12: NW $\frac{1}{4}$ NW $\frac{1}{4}$	40	Lease 1 9-22-70	Bess Yearwood, Trustee 4.687500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 2 9-14-70	Nordon Corporation, Ltd. 9.375000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 3 11-8-70	Powhaton Carter, Jr. and Anderson Carter 4.687500% 18.750000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
23	T-23-S, R-34-E Sec. 12: S $\frac{1}{2}$ NW $\frac{1}{4}$	80	Lease 1 9-14-70	Nordon Corporation, Ltd. 9.375000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 2 8-20-70	Viola B. Catchings 9.375000% 18.750000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
24	T-23-S, R-34-E Sec. 12: SW $\frac{1}{4}$ NE $\frac{1}{4}$	40	Lease 1 8-19-70	Weldon E. Page Edna O. Mobley Opal A. Page Roy M. Page 2.343750% 2.343750% 2.343750% 2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 2 1-26-71	Lois Haskell Straight .073250%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 3 8-31-70	W. J. Moran, et ux 2.270500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 4 1-24-66	M. W. Coll, et ux 2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 5 2-14-71	Hugh Corrigan, et ux 4.687500% 18.750000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%

Tract No.	Description	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
25	T-23-S, R-34-E Sec. 12: SE $\frac{1}{4}$ NE $\frac{1}{4}$	40	Lease 1 9-14-70	Nordon Corporation, Ltd. 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 2 6-29-70		Hugh Ward R. Sanders Ward Alphaelia Ward Fatcliff Jessie Ward Roberts Velma Ward Kerr Josie Ward Gibbs	.781250% .781250% .781250% .781250% .781250% .781250% .781250%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 3 1-26-71		Lois Haskell Straight	.073245%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 4 9-27-70		Kate A. Herwig Luella Collett	1.953125% 1.171875%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 5 8-31-70		W. J. Moran, et ux	2.270505%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 6 1-24-66		M. W. Coll, et ux	2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
	Lease 7 2-14-71		Hugh Corrigan, et ux	4.687500% <u>18.750000%</u>	The Superior Oil Company 100%	None	The Superior Oil Company 100%
26	T-23-S, R-34-E Sec. 12: NE $\frac{1}{4}$ SE $\frac{1}{4}$	40	Lease 1 9-14-70	Nordon Corporation, Ltd. 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 75%
	Lease 2 1-26-71		Lois Haskell Straight	.073245%	The Superior Oil Company 100%	None	The Superior Oil Company 75%
	Lease 3 9-27-70		Kate A. Herwig Luella Collett	1.953125% 1.171875%	The Superior Oil Company 100%	None	The Superior Oil Company 75%

Tract No.	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
27	40	Lease 4 8-31-70	W. J. Moran, et ux 2.270505%	The Superior Oil Company 100%	None	The Superior Oil Company 75%
		Lease 5 1-24-66	M. W. Coll, et ux 2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 75%
		Lease 6 2-14-71	Hugh Corrigan, et ux 4.687500%	The Superior Oil Company 100%	None	The Superior Oil Company 75%
		Not Leased	Lois Horton 14.062500%			
		Lease 1 9-14-70	Nordon Corporation, Ltd. 2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 50%
27	40	Lease 2 1-26-71	Lois Haskell Straight .073245%	The Superior Oil Company 100%	None	The Superior Oil Company 50%
		Lease 3 9-27-70	Kate A. Herwig Luella Collett 1.464844% .878906%	The Superior Oil Company 100%	None	The Superior Oil Company 50%
		Lease 4 8-31-70	W. J. Moran, et ux 2.270505%	The Superior Oil Company 100%	None	The Superior Oil Company 50%
		Lease 5 1-24-66	M. W. Coll, et ux 2.343750%	The Superior Oil Company 100%	None	The Superior Oil Company 50%
		Not Leased	9.375000%			
27	40	Not Leased	Ruth Marion 8.3333%			
		Not Leased	Ora Mae Davis 8.3333%			
		Not Leased	Annis B. Hollis 8.3333%			
		Not Leased	J. H. Medlin, Jr. 8.3333%			
		Not Leased	Albert E. Medlin 8.3333%			
27	40	Not Leased	Beulah Baird 8.3333%			
		Not Leased				
		Not Leased				
		Not Leased				
		Not Leased				

Not Leased - 50%

Tract No.	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
28	40	T-23-S, R-34-E Sec. 12: NE 1/4 NW 1/4				
		Lease 1 8-19-70	Rebel Oil Company 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 2 8-19-70	Roy G. Barton, Jr. 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 3 9-20-70	J. Hiram Moore 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 4 9-24-70	May Ellett 9.375000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 5 11-8-70	Powhation Carter, Jr. and Anderson Carter 4.687500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
29	40	T-23-S, R-34-E Sec. 12: NW 1/4 SW 1/4				
		Lease 1 10-18-70	May Woolworth Elizabeth Woolworth 7.031250%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 2 10-18-70	Myrtis Dean Watkins 1.562500% Martha Watkins Harris Clyde W. Miller 1.562500% 18.750000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
30	40	T-23-S, R-34-E Sec. 12: SW 1/4 SW 1/4				
		Lease 1 8-19-70	Rebel Oil Company 3.125000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 2 8-19-70	Roy G. Barton, Jr. 3.125000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 3 9-20-70	J. Hiram Moore 3.125000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 4 11-8-70	Powhation Carter, Jr. and Anderson Carter 9.375000% 18.750000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%

Tract No.	Description	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
31	T-23-S, R-34-E Sec. 12: SE $\frac{1}{4}$ SW $\frac{1}{4}$	40	Lease 1 2-9-66	Mrs. Joyce C. Brown 9.375000% (One-Half Interest; for life with Remainder to Joyce Ann Brown)	The Superior Oil Company 100%	None	The Superior Oil Company 100%
32	T-23-S, R-34-E Sec. 12: SW $\frac{1}{4}$ SE $\frac{1}{4}$	40	Lease 1 9-14-70	B. A. Christmas, Jr. 9.375000% (One-Half Interest for life with Remainder to Mary Theresa Christmas, Bradford Ace Christ- mas, Candy Christmas, and Helen Jane Christmas, Share and Share Alike)	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 2 8-23-70	Nordon Corporation, Ltd.	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 3 1-26-71	S. H. Kammeyer, Trustee	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 4 9-27-70	Lois Haskell Straight	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 5 8-31-70	Kate A. Herwig Luella Collett	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			Lease 6 1-24-66	W. J. Moran, et ux	The Superior Oil Company 100%	None	The Superior Oil Company 100%
				M. W. Coll, et ux	The Superior Oil Company 100%	None	The Superior Oil Company 100%
				2.343750%			
				18.750000%			

Tract No.	No. of Acres	Lease Serial No. & Expiration Date	Basic Royalty and Percentage	Lessee of Record and Percentage	Overriding Royalty and Percentage	Working Interest and Percentage
33	43	Lease 1 8-19-70	Rebel Oil Company 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 2 8-19-70	Roy G. Barton, Jr. 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 3 9-20-70	J. Hiram Moore 1.562500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 4 9-14-70	Nordon Corporation, Ltd. 9.375000%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
		Lease 5 11-8-70	Powhaton Carter, Jr. and Anderson Carter 4.687500%	The Superior Oil Company 100%	None	The Superior Oil Company 100%
			18.750000%			

17 Tracts, Fee Lands, 680 Acres, 15.18% of the Unit Area

RECAPITULATION

Federal Lands Committed	960 acres	21.43%
Uncommitted	320 acres	7.14%
Subtotal	1,280 acres	28.57%
State Lands Committed	2,520 acres	56.25%
Fee Lands Committed	623.18 acres	13.91%
Uncommitted	56.82 acres	1.27%
Subtotal	680.00 acres	15.18%
Total Lands	4,480.00 acres	100.00%

BEFORE THE OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF THE  
NORTH ANTELOPE RIDGE UNIT AGREEMENT  
LEA COUNTY, NEW MEXICO

Case 3354

New Mexico Oil Conservation Commission  
Santa Fe, New Mexico

Shell Oil Company, with offices at Midland, Texas, files herewith one copy of a proposed Unit Agreement for the development and operation of the North Antelope Ridge Unit Area, Lea County, New Mexico, and makes application for approval of said Unit Agreement as provided by law, and in support thereof states:

1. That the proposed Unit Area covered by this agreement embraces 4,480.00 acres of land, more or less, more particularly described as follows:

NEW MEXICO PRINCIPAL MERIDIAN

Township 23 South, Range 34 East

Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 22: All  
Section 23: All

Containing 4,480 acres, more or less.

2. That the lands embraced within the proposed unit area contain 1,280 acres of Federal lands, being 28.57% of the area; 2,520 acres of State of New Mexico lands, being 56.25% of the area, and 680 acres of fee or patented lands, being 15.18% of the area.
3. That application is being made for the designation of said unit area and for the approval of the form of Unit Agreement by the Commissioner of Public Lands of the State of New Mexico.
4. That applicant is informed and believes, and upon such information and belief states, that the proposed unit area contains all, or substantially all, of the geological feature involved, and that in the event of the discovery of oil or gas thereon, that said Unit Agreement will permit the producing areas to be developed and operated in the interest of conservation and the prevention of waste of the unitized substances.



5. That Shell Oil Company is designated as the Unit Operator in the Unit Agreement, and as such is given authority under the terms of the agreement to carry on all operations necessary for the development and operation of the unit area for oil and gas, subject to all applicable laws and regulations. That the Unit Agreement provides for the drilling of an initial test well to a depth sufficient to test the Siluro-Devonian formation, but that applicant is not obligated to drill said well, in any event, to a depth in excess of 14,800 feet.

6. That applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, that the field or area can be developed more economically and efficiently under the terms of the Unit Agreement, to the end that the maximum recovery will be obtained of unitized substances, and that the Unit Agreement is in the interest of conservation and prevention of waste as contemplated by the New Mexico Oil Conservation Commission Statutes and Regulations.

7. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof by the Commissioner of Public Lands of the State of New Mexico, and after approval by the United States Department of the Interior, an approved copy will be filed with the New Mexico Oil Conservation Commission.

WHEREFORE, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the approval of the Unit Agreement, and that upon said hearing, said Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interests of conservation and the prevention of waste.

Dated this 17th day of November, 1965.

Respectfully submitted,

SHELL OIL COMPANY

By R. A. Clarke  
R. A. Clarke, Western Division Land  
Manager, Midland, Texas

BEFORE THE OIL CONSERVATION COMMISSION  
STATE OF NEW MEXICO

APPLICATION FOR APPROVAL OF THE  
NORTH ANTELOPE RIDGE UNIT AGREEMENT  
LEA COUNTY, NEW MEXICO

*Case 3354*

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Santa Fe, New Mexico

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NEW MEXICO PRINCIPAL MERIDIAN

Township 23 South, Range 34 East

Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 22: All  
Section 23: All

Containing 4,480 acres, more or less.

2. That the lands embraced within the proposed unit area contain 1,280 acres of Federal lands, being 28.57% of the area; 2,520 acres of State of New Mexico lands, being 56.25% of the area, and 680 acres of fee or patented lands, being 15.18% of the area.
3. That application is being made for the designation of said unit area and for the approval of the form of Unit Agreement by the Commissioner of Public Lands of the State of New Mexico.
4. That applicant is informed and believes, and upon such information and belief states, that the proposed unit area contains all, or substantially all, of the geological feature involved, and that in the event of the discovery of oil or gas thereon, that said Unit Agreement will permit the producing areas to be developed and operated in the interest of conservation and the prevention of waste of the unitized substances.

5. That Shell Oil Company is designated as the Unit Operator in the Unit Agreement, and as such is given authority under the terms of the agreement to carry on all operations necessary for the development and operation of the unit area for oil and gas, subject to all applicable laws and regulations. That the Unit Agreement provides for the drilling of an initial test well to a depth sufficient to test the Siluro-Devonian formation, but that applicant is not obligated to drill said well, in any event, to a depth in excess of 14,800 feet.

6. That applicant believes that in the event oil or gas in paying quantities is discovered on the lands within the unit area, that the field or area can be developed more economically and efficiently under the terms of the Unit Agreement, to the end that the maximum recovery will be obtained of unitized substances, and that the Unit Agreement is in the interest of conservation and prevention of waste as contemplated by the New Mexico Oil Conservation Commission Statutes and Regulations.

7. That upon an order being entered by the New Mexico Oil Conservation Commission approving said Unit Agreement, and after approval thereof by the Commissioner of Public Lands of the State of New Mexico, and after approval by the United States Department of the Interior, an approved copy will be filed with the New Mexico Oil Conservation Commission.

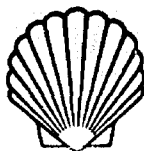
WHEREFORE, the undersigned applicant respectfully requests that a hearing be held before an examiner on the matter of the approval of the Unit Agreement, and that upon said hearing, said Unit Agreement be approved by the New Mexico Oil Conservation Commission as being in the interests of conservation and the prevention of waste.

Dated this 17th day of November, 1965.

Respectfully submitted,

SHELL OIL COMPANY

By R. A. Clarke  
R. A. Clarke, Western Division Land  
Manager, Midland, Texas



# SHELL OIL COMPANY

WESTERN DIVISION  
P. O. BOX 1509  
MIDLAND, TEXAS 79704

November 17, 1965

Subject: Lea County, New Mexico  
North Antelope Ridge Unit Area

*Case 3354*

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico

Attention Mr. Pete Porter

Gentlemen:

Pursuant to our telephone conversation of this morning, we are furnishing herewith the original and two copies of our Application for Approval of the North Antelope Ridge Unit Agreement, together with one copy of said agreement.

We should appreciate your placing this request on the docket for the examiner hearing to be held on December 14, 1965.

Yours very truly,

R. A. Clarke  
Western Division Land Manager

Enclosures

DOCKET MAILED

Date 12-1-65  
*[Signature]*

UNIT AGREEMENT  
FOR THE DEVELOPMENT AND OPERATION OF THE  
NORTH ANTELOPE RIDGE UNIT AREA  
LEA COUNTY, NEW MEXICO  
NO. \_\_\_\_\_

*Page 3354*

THIS AGREEMENT, entered into as of the 2nd day of November, 1965, by and between the parties subscribing, ratifying, or consenting hereto, and herein referred to as the "parties hereto",

WITNESSETH:

WHEREAS, the parties hereto are the owners of working, royalty or other oil and gas interests in the unit area subject to this agreement; and,

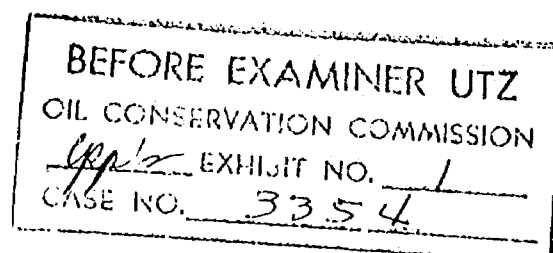
WHEREAS, the Mineral Leasing Act of February 25, 1920, 41 Stat. 437, as amended, 30 U. S. C. Secs. 181 et seq., authorized Federal lessees and their representatives to unite with each other, or jointly or separately with others, in collectively adopting and operating a cooperative or unit plan of development or operation of any oil or gas pool, field, or like area, or any part thereof for the purpose of more properly conserving the natural resources thereof whenever determined and certified by the Secretary of the Interior to be necessary or advisable in the public interest; and,

WHEREAS, the Commissioner of Public Lands of the State of New Mexico is authorized by an Act of the Legislature (Sec. 7-11-39 N.M. Statutes 1953 Annotated) to consent to or approve this agreement on behalf of the State of New Mexico, insofar as it covers and includes lands and mineral interests of the State of New Mexico; and,

WHEREAS, the Oil Conservation Commission of the State of New Mexico is authorized by an Act of the Legislature (Article 3, Chapter 65, Volume 9, Part 2, 1953 Statutes) to approve this agreement and the conservation provisions hereof; and,

WHEREAS, the parties hereto hold sufficient interests in the North Antelope Ridge Unit Area covering the land hereinafter described to give reasonably effective control of operations therein; and,

WHEREAS, it is the purpose of the parties hereto to conserve natural resources, prevent waste, and secure other benefits obtainable through development and operation of the area subject to this agreement under the terms, conditions and limitations herein set forth;



NOW, THEREFORE, in consideration of the premises and the promises herein contained, the parties hereto commit to this agreement their respective interests in the below-defined unit area, and agree severally among themselves as follows:

1. ENABLING ACT AND REGULATIONS. The Mineral Leasing Act of February 25, 1920, as amended, supra, and all valid pertinent regulations, including operating and unit plan regulations, heretofore issued thereunder or valid, pertinent, and reasonable regulations hereafter issued thereunder are accepted and made a part of this agreement as to Federal lands, provided such regulations are not inconsistent with the terms of this agreement; and as to State of New Mexico and privately owned lands, the oil and gas operating regulations in effect as of the effective date hereof governing drilling and producing operations, not inconsistent with the terms hereof or the laws of the State of New Mexico are hereby accepted and made a part of this agreement.

2. UNIT AREA. The area specified on the map attached hereto marked Exhibit "A" is hereby designated and recognized as constituting the unit area, containing 4,480 acres, more or less.

Exhibit "A" shows, in addition to the boundary of the unit area, the boundaries and identity of tracts and leases in said area to the extent known to the Unit Operator. Exhibit "B" attached hereto is a schedule showing to the extent known to the Unit Operator the acreage, percentage, and kind of ownership of oil and gas interests in all land in the unit area. However, nothing herein or in said schedule or map shall be construed as a representation by any party hereto as to the ownership of any interest other than such interest or interests as are shown in said map or schedule as owned by such party. Exhibits "A" and "B" shall be revised by the Unit Operator whenever changes in the unit area render such revision necessary, or when requested by the Oil and Gas Supervisor, hereinafter referred to as "Supervisor", or when requested by the Commissioner of Public Lands of the State of New Mexico, hereinafter referred to as "State Land Commissioner", and not less than seven copies of the revised exhibits shall be filed with the Supervisor, and two (2) copies thereof shall be filed with the State Land Commissioner and one (1) copy with the New Mexico Oil Conservation Commission, hereinafter referred to as "State Commission".

The above-described unit area shall when practicable be expanded to include therein any additional tract or tracts regarded as reasonably necessary or advisable for the purposes of this agreement, or shall be contracted to exclude lands not within any participating area whenever such expansion or contraction is necessary or advisable to conform with the purposes of this agreement. Such expansion or contraction shall be effected in the following manner:

(a) Unit Operator, on its own motion, or on demand of the Director of the Geological Survey, hereinafter referred to as "Director," or on demand of the State Land Commissioner, after preliminary concurrence by the Director, shall prepare a notice of proposed expansion or contraction describing the contemplated changes in the boundaries of the unit area, the reasons therefor, and the proposed effective date thereof, preferably the first day of a month subsequent to the date of notice.

(b) Said notice shall be delivered to the Supervisor, the State Land Commissioner and the State Commission and copies thereof mailed to the last known address of each working interest owner, lessee, and lessor whose interests are affected, advising that 30 days will be allowed for submission to the Unit Operator of any objections.

(c) Upon expiration of the 30-day period provided in the preceding item (b) hereof, Unit Operator shall file with the Supervisor, the State Land Commissioner and the State Commission evidence of mailing of the notice of expansion or contraction and a copy of any objections thereto which have been filed with the Unit Operator, together with an application in sufficient number, for approval of such expansion or contraction and with appropriate joinders.

(d) After due consideration of all pertinent information, the expansion or contraction shall, upon approval by the Director, the State Land Commissioner and the State Commission, become effective as of the date prescribed in the notice thereof.

(e) All legal subdivisions of unitized lands (i.e., 40 acres by Government survey or its nearest lot or tract equivalent in instances of irregular surveys, however, unusually large lots or tracts shall be considered in multiples of 40 acres, or the nearest aliquot equivalent thereof, for the purpose of elimination under this subsection), no parts of which are entitled to be in a participating area within five years after the first day of the month following the

effective date of the first initial participating area established under this unit agreement, shall be eliminated automatically from this agreement, effective as of the first day thereafter, and such lands shall no longer be a part of the unit area and shall no longer be subject to this agreement, unless at the expiration of said five-year period diligent drilling operations are in progress on unitized lands not entitled to participation, in which event all such lands shall remain subject hereto for so long as such drilling operations are continued diligently, with not more than 90 days time elapsing between the completion of one such well and the commencement of the next such well, except that the time allowed between such wells shall not expire earlier than 30 days after the expiration of any period of time during which drilling operations are prevented by a matter beyond the reasonable control of unit operator as set forth in the section hereof entitled "Unavoidable Delay;" provided that all legal subdivisions of lands not in a participating area and not entitled to become participating under the applicable provisions of this agreement within ten years after said first day of the month following the effective date of said first initial participating area shall be eliminated as above specified. Determination of creditable "Unavoidable Delay" time shall be made by Unit Operator and subject to approval of the Director and the State Land Commissioner. The Unit Operator shall, within 90 days after the effective date of any elimination hereunder, describe the area so eliminated to the satisfaction of the Director and the Commissioner and promptly notify all parties in interest.

If conditions warrant extension of the ten-year period specified in this sub-section 2 (e), a single extension of not to exceed two years may be accomplished by consent of the owners of 90 per cent of the current unitized working interests and 60 per cent of the current unitized basic royalty interests (exclusive of the basic royalty interests of the United States), on a total nonparticipating acreage basis, respectively, with approval of the Director, and the State Land Commissioner provided such extension application is submitted to the Director and to the State Land Commissioner not later than 60 days prior to the expiration of said ten-year period.

Any expansion of the unit area pursuant to this section which embraces lands theretofore eliminated pursuant to this sub-section 2 (e) shall not be considered automatic commitment or recommitment of such lands.



3. UNITIZED LAND AND UNITIZED SUBSTANCES. All land committed to this agreement shall constitute land referred to herein as "unitized land" or "land subject to this agreement." All oil and gas in any and all formations of the unitized land are unitized under the terms of this agreement and herein are called "unitized substances."

4. UNIT OPERATOR. Shell Oil Company with offices at Midland, Texas, is hereby designated as Unit Operator and by signature hereto as Unit Operator commits to this agreement all interests in unitized substances vested in them and agrees and consents to accept the duties and obligations of Unit Operator for discovery, development and production of unitized substances as herein provided. Whenever reference is made herein to the Unit Operator, such reference means the Unit Operator acting in that capacity and not as an owner of interest in unitized substances, and the term "working interest owner" when used herein shall include or refer to Unit Operator as the owner of a working interest when such an interest is owned by him.

5. RESIGNATION OR REMOVAL OF UNIT OPERATOR. Unit Operator shall have the right to resign at any time prior to the establishment of a participating area or areas hereunder, but such resignation shall not become effective so as to release Unit Operator from the duties and obligations of Unit Operator and terminate Unit Operator's rights as such for a period of six months after notice of intention to resign has been served by Unit Operator on all working interest owners and the Director, the State Land Commissioner and State Commission and until all wells then drilled hereunder are placed in a satisfactory condition for suspension or abandonment whichever is required by the Supervisor as to Federal lands and by the State Commission as to State and privately owned lands unless a new Unit Operator shall have been selected and approved and shall have taken over and assumed the duties and obligations of Unit Operator prior to the expiration of said period.

Unit Operator shall have the right to resign in like manner and subject to like limitations, as above provided, at any time a participation area established hereunder is in existence, but, in all instances of resignation or removal, until a successor Unit Operator is selected and approved as hereinafter provided, the working interest owners shall be jointly responsible for performance

of the duties of Unit Operator, and shall not later than 30 days before such resignation or removal becomes effective appoint a common agent to represent them in any action to be taken hereunder.

The resignation of Unit Operator shall not release Unit Operator from any liability for any default by it hereunder occurring prior to the effective date of its resignation.

The Unit Operator may, upon default or failure in the performance of its duties or obligations hereunder, be subject to removal by the same percentage vote of the owners of working interests determined in like manner as herein provided for the selection of a new Unit Operator. Such removal shall be effective upon notice thereof to the Director and the State Land Commissioner.

The resignation or removal of Unit Operator under this agreement shall not terminate its right, title, or interest as the owner of a working interest or other interest in unitized substances, but upon the resignation or removal of Unit Operator becoming effective, such Unit Operator shall deliver possession of all equipment, materials, and appurtenances used in conducting the unit operations and owned by the working interest owners to the new duly qualified successor Unit Operator or to the owners thereof if no such new Unit Operator is elected, to be used for the purpose of conducting unit operations hereunder. Nothing herein shall be construed as authorizing removal of any material, equipment and appurtenances needed for the preservation of any wells.

6. SUCCESSOR UNIT OPERATOR. Whenever the Unit Operator shall tender his or its resignation as Unit Operator, or shall be removed as hereinabove provided, or a change of unit operator is negotiated by working interest owners, the owners of the working interests in the participating area or areas according to their respective acreage interests in such participating area or areas, or until a participating area shall have been established, the owners of the working interests according to their respective acreage interests in all unitized land, shall by majority vote select a successor Unit Operator; provided that, if a majority but less than 75 per cent of the working interests qualified to vote are owned by one party to this agreement, a concurring vote of one or more additional working interest owners shall be required to select a new operator. Such selection shall not become effective until:

(a) a Unit Operator so selected shall accept in writing the duties and responsibilities of Unit Operator, and

(b) the selection shall have been filed with the Supervisor.

If no successor unit operator is selected and qualified as herein provided, the Director at his election may declare this unit agreement terminated.

7. ACCOUNTING PROVISIONS AND UNIT OPERATING AGREEMENT. If the Unit Operator is not the sole owner of working interests, costs and expenses incurred by Unit Operator in conducting unit operations hereunder shall be paid and apportioned among and borne by the owners of working interests, all in accordance with the agreement or agreements entered into by and between the Unit Operator and the owners of working interests, whether one or more, separately or collectively. Any agreement or agreements entered into between the working interest owners and the Unit Operator as provided in this section, whether one or more, are herein referred to as the "Unit Operating Agreement." Such unit operating agreement shall also provide the manner in which the working interest owners shall be entitled to receive their respective proportionate and allocated share of the benefits accruing hereto in conformity with their underlying operating agreements, leases, or other independent contracts, and such other rights and obligations as between Unit Operator and the working interest owners as may be agreed upon by Unit Operator and the working interest owners; however, no such unit operating agreement shall be deemed either to modify any of the terms and conditions of this unit agreement or to relieve the Unit Operator of any right or obligation established under this unit agreement, and in case of any inconsistency or conflict between the unit agreement and the unit operating agreement, this unit agreement shall prevail. Three (3) true copies of any unit operating agreement executed pursuant to this section should be filed with the Supervisor and one (1) true copy with the State Land Commissioner, prior to approval of this unit agreement by the Director.

8. RIGHTS AND OBLIGATIONS OF UNIT OPERATOR. Except as otherwise specifically provided herein, the exclusive right, privilege, and duty of exercising any and all rights of the parties hereto which are necessary or convenient for prospecting for, producing, storing, allocating, and distributing the unitized

substances are hereby delegated to and shall be exercised by the Unit Operator as herein provided. Acceptable evidence of title to said rights shall be deposited with said Unit Operator and, together with this agreement shall constitute and define the rights, privileges, and obligations of Unit Operator. Nothing herein, however, shall be construed to transfer title to any land or to any lease or operating agreement, it being understood that under this agreement the Unit Operator, in its capacity as Unit Operator, shall exercise the rights of possession and use vested in the parties hereto only for the purposes herein specified.

9. DRILLING TO DISCOVERY. Within six months after the effective date hereof, the Unit Operator shall begin to drill an adequate test well at a location approved by the Supervisor if on Federal land or by the State Land Commissioner if on State land, or by the State Commission if on privately owned land, unless on such effective date a well is being drilled conformably with the terms hereof, and thereafter continue such drilling diligently until the Siluro-Devonian formation has been tested or until at a lesser depth unitized substances shall be discovered which can be produced in paying quantities (to-wit: quantities sufficient to repay the costs of drilling and producing operations, with a reasonable profit) or the Unit Operator shall at any time establish to the satisfaction of the Supervisor if on Federal land, or the State Land Commissioner if on State land, or of the State Commission if on privately owned land, that further drilling of said well would be unwarranted or impracticable; provided however, that Unit Operator shall not in any event be required to drill said well to a depth in excess of 14,800 feet. Until the discovery of a deposit of unitized substances capable of being produced in paying quantities, the Unit Operator shall continue drilling diligently one well at a time, allowing not more than six months between the completion of one well and the beginning of the next well, until a well capable of producing unitized substances in paying quantities is completed to the satisfaction of said Supervisor if it be on Federal land or of the State Land Commissioner if on State land or the State Commission if on privately owned land or until it is reasonably proved that the unitized land is incapable of producing unitized substances in paying quantities in the formations drilled hereunder. Nothing in this section shall be deemed to limit the right of the Unit Operator

to resign as provided in Section 5 hereof, or as requiring Unit Operator to commence or continue any drilling during the period pending such resignation becoming effective in order to comply with the requirements of this section. The Director and State Land Commissioner may modify the drilling requirements of this section by granting reasonable extensions of time when, in their opinion, such action is warranted.

Upon failure to comply with the drilling provisions of this section, the Director and State Land Commissioner may, after reasonable notice to the Unit Operator, and each working interest owner, lessee, and lessor at their last known addresses, declare this unit agreement terminated.

10. PLAN OF FURTHER DEVELOPMENT AND OPERATION. Within six months after completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall submit for the approval of the Supervisor and the State Land Commissioner an acceptable plan of development and operation for the unitized land which, when approved by the Supervisor and the State Land Commissioner, shall constitute the further drilling and operating obligations of the Unit Operator under this agreement for the period specified therein. Thereafter, from time to time before the expiration of any existing plan, the Unit Operator shall submit for the approval of the Supervisor and the State Land Commissioner a plan for an additional specified period for the development and operation of the unitized land. Any plan submitted pursuant to this section shall provide for the exploration of the unitized area and for the diligent drilling necessary for determination of the area or areas thereof capable of producing unitized substances in paying quantities in each and every productive formation and shall be as complete and adequate as the Supervisor and the State Land Commissioner may determine to be necessary for timely development and proper conservation of the oil and gas resources of the unitized area and shall:

(a) specify the number and location of any wells to be drilled and the proposed order and time for such drilling; and,

(b) to the extent practicable specify the operating practices regarded as necessary and advisable for the proper conservation of natural resources. Separate plans may be submitted for separate productive zones, subject to the approval of the Supervisor and the State Land Commissioner. Said plan or plans

shall be modified or supplemented when necessary to meet charged conditions, or to protect the interests of all parties to this agreement. Reasonable diligence shall be exercised in complying with the obligations of the approved plan of development. The Supervisor and State Land Commissioner are authorized to grant a reasonable extension of the six-month period herein prescribed for submission of an initial plan of development where such action is justified because of unusual conditions or circumstances. After completion hereunder of a well capable of producing any unitized substance in paying quantities, no further wells, except such as may be necessary to afford protection against operations not under this agreement or such as may be specifically approved by the Supervisor and the State Land Commissioner shall be drilled except in accordance with a plan of development approved as herein provided.

11. PARTICIPATION AFTER DISCOVERY. Upon completion of a well capable of producing unitized substances in paying quantities, the Unit Operator shall within the month of such completion, if practicable, or as soon thereafter as required by the Supervisor or the State Land Commissioner submit for approval by the Director and the State Land Commissioner a schedule, based on subdivisions of the public land survey or aliquot parts thereof of all unitized land then regarded as reasonably proved to be productive of unitized substances in paying quantities; all lands in said schedule on approval of the Director and the State Land Commissioner to constitute a participating area, effective as of the date of completion of such well or the effective date of the unit agreement, whichever is later. The acreages of both Federal and non-Federal lands shall be based upon appropriate computations from the courses and distances shown on the last approved public land survey as of the effective date of the initial participating area. Said schedule also shall set forth the percentage of unitized substances to be allocated as herein provided to each unitized tract in the participating area so established, and shall govern the allocation of production from and after the date the participating area becomes effective. A separate participating area shall be established in like manner for each separate pool or deposit of unitized substances or for any group thereof produced as a single pool or zone, and any two or more participating areas so established may be combined into one with the consent of the owners of all working interests in

the lands within the participating areas so to be combined, on approval of the Director and the State Land Commissioner. The participating area or areas so established shall be revised from time to time, subject to like approval, whenever such action appears proper as a result of further drilling operations or otherwise, to include additional land then regarded as reasonable proved to be productive in paying quantities, or to exclude land then regarded as reasonably proved not to be productive in paying quantities and the percentage of allocation shall also be revised accordingly. The effective date of any revision shall be the first of the month in which is obtained the knowledge or information on which such revision is predicated, provided, however, that a more appropriate effective date may be used if justified by the Unit Operator and approved by the Director and the State Land Commissioner. No land shall be excluded from a participating area on account of depletion of the unitized substances.

It is the intent of this section that a participating area shall represent the area known or reasonably estimated to be productive in paying quantities; but, regardless of any revision of the participating area, nothing herein contained shall be construed as requiring any retroactive adjustment for production obtained prior to the effective date of the revision of the participating area.

In the absence of agreement at any time between the Unit Operator and the Director and the State Land Commissioner as to the proper definition or redefinition of a participating area, or until a participating area has, or areas have, been established as provided herein, the portion of all payments affected thereby may be impounded in a manner mutually acceptable to the owners of working interests, except royalties due the United States and the State of New Mexico, which shall be determined by the Supervisor for Federal lands and the State Land Commissioner for State lands and the State Commission as to privately owned lands and the amount thereof deposited, as directed by the Supervisor and the State Land Commissioner respectively, to be held as unearned money until a participating area is finally approved and then applied as earned or returned in accordance with a determination of the sum due as Federal and State royalty on the basis of such approved participating area.

Whenever it is determined, subject to the approval of the Supervisor, as to wells drilled on Federal land and of the State Land Commissioner as to wells drilled on State land and the State Commission as to wells on privately owned lands, that a well drilled under this agreement is not capable of production in paying quantities and inclusion of the land on which it is situated in a participating area is unwarranted, production from such well shall, for the purposes of settlement among all parties other than working interest owners, be allocated to the land on which the well is located so long as such land is not within a participating area established for the pool or deposit from which such production is obtained. Settlement for working interest benefits from such a well shall be made as provided in the unit operating agreement.

12. ALLOCATION OF PRODUCTION. All unitized substances produced from each participating area established under this agreement, except any part thereof used in conformity with good operating practices within the unitized area for drilling, operating, camp and other production or development purposes, for repressuring or recycling in accordance with a plan of development approved by the Supervisor, and the State Land Commissioner, or unavoidably lost, shall be deemed to be produced equally on an acreage basis from the several tracts of unitized land of the participating area established for such production and, for the purpose of determining any benefits accruing under this agreement, each such tract of unitized land shall have allocated to it such percentage of said production as the number of acres of such tract included in said participating area bears to the total acres of unitized land in said participating area, except that allocation of production hereunder for purposes other than for settlement of the royalty, overriding royalty, or payment out of production obligations of the respective working interest owners, shall be on the basis prescribed in the unit operating agreement whether in conformity with the basis of allocation herein set forth or otherwise. It is hereby agreed that production of unitized substances from a participating area shall be allocated as provided herein regardless of whether any wells are drilled on any particular part or tract of said participating area. If any gas produced from one participating area is used for repressuring or recycling purposes in another participating area, the first gas withdrawn from such last-mentioned participating area for sale during the life



of this agreement shall be considered to be the gas so transferred until an amount equal to that transferred shall be so produced for sale and such gas shall be allocated to the participating area from which initially produced as constituted at the time of such final production.

13. DEVELOPMENT OR OPERATION OF NON-PARTICIPATING LAND OR FORMATIONS.

Any party or parties hereto owning or controlling the working interests in any unitized land having thereon a regular well location may with the approval of the Supervisor as to Federal land, the State Land Commissioner as to State land, and the State Commission as to privately owned land, and subject to the provisions of the Unit Operating Agreement, at such party's or parties' sole risk, costs, and expense drill a well at such location on such land to test any formation for which a participating area has not been established or to test any formation for which a participating area has been established if such location is not within said participating area, unless within 90 days of receipt of notice from said party of his intention to drill the well the Unit Operator elects and commences to drill such a well in like manner as other wells are drilled by the Unit Operator under this agreement.

If any well drilled as aforesaid by a working interest owner results in production such that the land upon which it is situated may properly be included in a participating area, such participating area shall be established or enlarged as provided in this agreement and the well shall thereafter be operated by the Unit Operator in accordance with the terms of this agreement and the unit operating agreement.

If any well drilled as aforesaid by a working interest owner obtains production in quantities insufficient to justify the inclusion in a participating area of the land upon which such well is situated, such well may be operated and produced by the party drilling the same subject to the conservation requirements of this agreement. The royalties in amount or value of production from any such well shall be paid as specified in the underlying lease and agreements affected.

14. ROYALTY SETTLEMENT. The United States and the State of New Mexico and all royalty owners who, under existing contract, are entitled to take in kind a share of the substances now unitized hereunder produced from any tract, shall hereafter be entitled to the right to take in kind their share of the unitized

substances allocated to such tract, and Unit Operator, or in case of the operation of a well by a working interest owner as herein in special cases provided for, such working interest owner, shall make deliveries of such royalty share taken in conformity with the applicable contracts, laws and regulations. Settlement for royalty interest not taken in kind shall be made by working interest owners responsible therefor under existing contracts, laws and regulations on or before the last day of each month for unitized substances produced during the preceding calendar month; provided, however, that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any royalties due under their leases.

If gas obtained from lands not subject to this agreement is introduced into any participating area hereunder, for use in repressuring, stimulation of production, or increasing ultimate recovery, which shall be in conformity with a plan first approved by the Supervisor, the State Land Commissioner, and the State Commission, a like amount of gas, after settlement as herein provided for any gas transferred from any other participating area and with due allowance for loss or depletion from any cause, may be withdrawn from the formation into which the gas was introduced, royalty free as to dry gas, but not as to the products extracted therefrom; provided that such withdrawal shall be at such time as may be provided in the plan of operations or as may otherwise be consented to by the Supervisor, the State Land Commissioner and the State Commission as conforming to good petroleum engineering practice; and provided further, that such right of withdrawal shall terminate on the termination of this unit agreement.

Royalty due the United States shall be computed as provided in the operating regulations and paid in value or delivered in kind as to all unitized substances on the basis of the amounts thereof allocated to unitized Federal land as provided herein at the rates specified in the respective Federal leases, or at such lower rate or rates as may be authorized by law or regulations; provided, that for leases on which the royalty rate depends on the daily average production per well, said average production shall be determined in accordance with the operating regulations as though each participating area were a single consolidated lease.

Royalty due on account of State of New Mexico and privately owned lands, shall be computed and paid as to all unitized substances on the basis of the amounts allocated to such lands.

15. RENTAL SETTLEMENT. Rental or minimum royalties due on leases committed hereto shall be paid by working interest owners responsible therefor under existing contracts, laws, and regulations, provided that nothing herein contained shall operate to relieve the lessees of any land from their respective lease obligations for the payment of any rental or minimum royalty in lieu thereof due under their leases. Rental or minimum royalty for lands of the United States subject to this agreement shall be paid at the rate specified in the respective leases from the United States unless such rental or minimum royalty is waived, suspended, or reduced by law or by approval of the Secretary or his duly authorized representative.

Rentals on State of New Mexico lands subject to this agreement shall be paid at the rates specified in the respective leases.

With respect to any lease on non-Federal land containing provisions which would terminate such lease unless drilling operations were within the time therein specified commenced upon the land covered thereby or rentals paid for the privilege of deferring such drilling operations, the rentals required thereby shall, notwithstanding any other provision of this agreement, be deemed to accrue and become payable during the term thereof as extended by this agreement and thereafter until the required drilling operations are commenced upon the land covered thereby or some portion of such land is included within a participating area.

16. CONSERVATION. Operations hereunder and production of unitized substances shall be conducted to provide for the most economical and efficient recovery of said substances without waste, as defined by or pursuant to State or Federal law or regulation.

17. DRAINAGE. The Unit Operator shall take appropriate and adequate measures to prevent drainage of unitized substances from unitized land by wells on land not subject to this agreement, or, with prior consent of the Director and the State Land Commissioner, pursuant to applicable regulations pay a fair and reasonable compensatory royalty as determined by the Supervisor for Federal

lands or as approved by the State Land Commissioner for New Mexico State lands.

18. LEASES AND CONTRACTS CONFORMED AND EXTENDED. The terms, conditions and provisions of all leases, subleases and other contracts relating to exploration, drilling, development or operations for oil or gas on lands committed to this agreement are hereby expressly modified and amended to the extent necessary to make the same conform to the provisions hereof, but otherwise to remain in full force and effect; and the parties hereto hereby consent that the Secretary as to Federal leases and the State Land Commissioner as to State leases shall and each by his approval hereof, or by the approval hereof by his duly authorized representative, does hereby establish, alter, change or revoke the drilling, producing, rental, minimum royalty and royalty requirements of Federal and State leases committed hereto and the regulations in respect thereto to conform said requirements to the provisions of this agreement and, without limiting the generality of the foregoing, all leases, subleases, and contracts are particularly modified in accordance with the following:

(a) The development and operation of lands subject to this agreement under the terms hereof shall be deemed full performance of all obligations for development and operation with respect to each and every part or separately owned tract subject to this agreement, regardless of whether there is any development of any particular part or tract of the unit area, notwithstanding anything to the contrary in any lease, operating agreement or other contract by and between the parties hereto, or their respective predecessors in interest, or any of them.

(b) Drilling and producing operations performed hereunder upon any tract of unitized lands will be accepted and deemed to be performed upon and for the benefit of each and every tract of unitized land, and no lease shall be deemed to expire by reason of failure to drill or produce wells situated on the land therein embraced.

(c) Suspension of drilling or producing operations on all unitized lands pursuant to direction or consent of the Secretary and the State Land Commissioner or their duly authorized representative, shall be deemed to constitute such suspension pursuant to such direction or consent as to each and every tract of unitized land.

(d) Each lease, sublease or contract relating to the exploration, drilling, development or operation for oil or gas of lands, other than those of the United States and State of New Mexico, committed to this agreement, which, by its terms might expire prior to the termination of this agreement, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of this agreement.

(e) Any Federal lease for a fixed term of twenty (20) years or any renewal thereof or any part of such lease which is made subject to this agreement shall continue in force beyond the term provided therein until the termination hereof. Any other Federal lease committed hereto shall continue in force beyond the term so provided therein or by law as to the land committed so long as such lease remains subject hereto, provided that production is had in paying quantities under this unit agreement prior to the expiration date of the term of such lease, or in the event actual drilling operations are commenced on unitized land, in accordance with the provisions of this agreement, prior to the end of the primary term of such lease and are being diligently prosecuted at that time, such lease shall be extended for two years and so long thereafter as oil or gas is produced in paying quantities in accordance with the provisions of the Mineral Leasing Act Revision of 1960.

(f) Each sublease or contract relating to the operation and development of unitized substances from lands of the United States committed to this agreement, which by its terms would expire prior to the time at which the underlying lease, as extended by the immediately preceding paragraph, will expire, is hereby extended beyond any such term so provided therein so that it shall be continued in full force and effect for and during the term of the underlying lease as such term is herein extended.

(g) Any lease embracing lands of the State of New Mexico which is made subject to this agreement, shall continue in force beyond the term provided therein as to the lands committed hereto until the termination hereof.

(h) The segregation of any Federal lease committed to this agreement is governed by the following provision in the fourth paragraph of Sec. 17 (j) of the Mineral Leasing Act, as amended by the Act of September 2, 1960, (74 Stat. 781-784): "Any (Federal) lease heretofore or hereafter committed to any such

(unit) plan embracing lands that are in part within and in part outside of the area covered by any such plan shall be segregated into separate leases as to the land committed and the lands not committed as of the effective date of unitization: Provided, however, that any such lease as to the nonunitized portion shall continue in force and effect for the term thereof but for not less than two years from the date of such segregation and so long thereafter as oil or gas is produced in paying quantities."

(1) Any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto, shall be segregated as to the portion committed and the portion not committed, and the provisions of such lease shall apply separately to such segregated portions commencing as of the effective date hereof; provided, however, notwithstanding any of the provisions of this agreement to the contrary, any lease embracing lands of the State of New Mexico having only a portion of its lands committed hereto shall continue in full force and effect beyond the term provided therein as to all lands embraced in such lease, if oil or gas is discovered and is capable of being produced in paying quantities from some part of the lands embraced in such lease at the expiration of the secondary term of such lease; or if, at the expiration of the secondary term, the Lessee or the Unit Operator is then engaged in bona fide drilling or reworking operations on some part of the lands embraced in such lease, the same, as to all lands embraced therein, shall remain in full force and effect so long as such operations are being diligently prosecuted, and if they result in the production of oil or gas, said lease shall continue in full force and effect as to all the lands embraced therein, so long thereafter as oil or gas in paying quantities is being produced from any portion of said lands.

19. COVENANTS RUN WITH LAND. The covenants herein shall be construed to be covenants running with the land with respect to the interest of the parties hereto and their successors in interest until this agreement terminates, and any grant, transfer or conveyance of interest in land or leases subject hereto shall be and hereby is conditioned upon the assumption of all privileges and obligations hereunder by the grantee, transferee or other successor in interest. No assignment or transfer of any working interest, royalty or other interest subject hereto shall be binding upon Unit Operator until the first day of the calendar month

after Unit Operator is furnished with the original, photostatic or certified copy of the instrument of transfer.

20. EFFECTIVE DATE AND TERM. This agreement shall become effective upon approval by the Director and the State Land Commissioner or their duly authorized representatives as of the date of approval by the Director and shall terminate five (5) years from said effective date unless:

(a) such date of expiration is extended by the Director and the State Land Commissioner, or

(b) it is reasonably determined prior to the expiration of the fixed term or any extension thereof that the unitized land is incapable of production of unitized substances in paying quantities in the formations tested hereunder and after notice of intention to terminate the agreement on such ground is given by the Unit Operator to all parties in interest at their last known addresses, the agreement is terminated with the approval of the Director and State Land Commissioner, or

(c) a valuable discovery of unitized substances has been made or accepted on unitized land during said initial term or any extension thereof, in which event the agreement shall remain in effect for such term and so long as unitized substances can be produced in quantities sufficient to pay for the cost of producing same from wells on unitized land within any participating area established hereunder and, should production cease, so long thereafter as diligent operations are in progress for the restoration of production or discovery of new production and so long thereafter as the unitized substances so discovered can be produced as aforesaid, or

(d) it is terminated as heretofore provided in this agreement. This agreement may be terminated at any time by not less than 75 per centum, on an acreage basis, of the owners of working interests signatory hereto, with the approval of the Director and State Land Commissioner; notice of any such approval to be given by the Unit Operator to all parties hereto.

21. RATE OF PROSPECTING, DEVELOPMENT AND PRODUCTION. The Director is hereby vested with authority to alter or modify from time to time in his discretion the quantity and rate of production under this agreement when such quantity and rate is not fixed pursuant to Federal or State law or does not conform to

any state-wide voluntary conservation or allocation program which is established, recognized and generally adhered to by the majority of operators in such State, such authority being hereby limited to alteration or modification in the public interest, the purpose thereof and the public interest to be served thereby to be stated in the order of alteration or modification. Without regard to the foregoing, the Director is also hereby vested with authority to alter or modify from time to time at his discretion the rate of prospecting and development and the quantity and rate of production under this agreement when such alteration or modification is in the interest of attaining the conservation objectives stated in this agreement and is not in violation of any applicable Federal or State law; provided further that no such alteration or modification shall be effective as to any land of the State of New Mexico as to the rate of prospecting and developing in the absence of the specific written approval thereof by the State Land Commissioner and as to the lands of the State of New Mexico or privately owned lands subject to this agreement as to the quantity and rate of production in the absence of specific written approval thereof by the State Commission.

Powers in this section vested in the Director shall only be exercised after notice to Unit Operator and opportunity for hearing to be held not less than fifteen (15) days from notice.

22. CONFLICT OF SUPERVISION. Neither the Unit Operator nor the working interest owners nor any of them shall be subject to any forfeiture, termination or expiration of any rights hereunder or under any leases or contracts subject hereto, or to any penalty or liability on account of delay or failure in whole or in part to comply with any applicable provision thereof to the extent that the Unit Operator, working interest owners or any of them are hindered, delayed or prevented from complying therewith by reason of failure of the Unit Operator to obtain in the exercise of due diligence, the concurrence of proper representatives of the United States and proper representatives of the State of New Mexico in and about any matters or thing concerning which it is required herein that such concurrence be obtained. The parties hereto, including the State Commission, agree that all powers and authority vested in the State Commission in and by any provisions of this agreement are vested in the State Commission and shall be exercised by it pursuant to the provisions of the laws of the State of



New Mexico and subject in any case to appeal or judicial review as may now or hereafter be provided by the laws of the State of New Mexico.

23. APPEARANCES. Unit Operator shall, after notice to other parties affected, have the right to appear for and on behalf of any and all interests affected hereby before the Department of Interior, the Commissioner of Public Lands of the State of New Mexico and the New Mexico Oil Conservation Commission and to appeal from orders issued under the regulations of said Department, the State Land Commissioner or State Commission or to apply for relief from any of said regulations or in any proceedings relative to operations before the Department of the Interior, the State Land Commissioner or State Commission or any other legally constituted authority; provided, however, that any other interested party shall also have the right at his own expense to be heard in any such proceeding.

24. NOTICES. All notices, demands or statements required hereunder to be given or rendered to the parties hereto shall be deemed fully given if given in writing and personally delivered to the party or sent by postpaid registered mail or certified mail, addressed to such party or parties at their respective addresses set forth in connection with the signatures hereto or the ratification or consent hereof or to such other address as any such party may have furnished in writing to the party sending the notice, demand or statement.

25. NO WAIVER OF CERTAIN RIGHTS. Nothing in this agreement contained shall be construed as a waiver by any party hereto of the right to assert any legal or constitutional right or defense as to the validity or invalidity of any law of the state wherein said unitized lands are located, or of the United States, or regulations issued thereunder in any way affecting such party, or as a waiver by any such party of any right beyond his or its authority to waive.

26. UNAVOIDABLE DELAY. All obligations under this agreement requiring the Unit Operator to commence or continue drilling or to operate on or produce unitized substances from any of the lands covered by this agreement shall be suspended while, but only so long as, the Unit Operator despite the exercise of due care and diligence is prevented from complying with such obligations, in whole or in part, by Strikes, acts of God, Federal, State or Municipal law or agencies, unavoidable accidents, uncontrollable delays in transportation, inability to obtain

necessary materials in open market, or other matters beyond the reasonable control of the Unit Operator whether similar to matters herein enumerated or not.

27. NONDISCRIMINATION. In connection with the performance of work under this agreement, the operator agrees to comply with all of the provisions of Section 202 (1) to (7) inclusive, of Executive Order 11246, as amended (30 F.R. 12319), which are hereby incorporated by reference in this agreement.

28. LOSS OF TITLE. In the event title to any tract of unitized land shall fail and the true owner cannot be induced to join in this unit agreement, such tract shall be automatically regarded as not committed hereto and there shall be such readjustment of future costs and benefits as may be required on account of the loss of such title. In the event of a dispute as to title as to any royalty, working interest or other interests subject thereto, payment or delivery on account thereof may be withheld without liability for interest until the dispute is finally settled; provided, that, as to Federal and State land or leases, no payments of funds due the United States or the State of New Mexico should be withheld, but such funds of the United States shall be deposited as directed by the Supervisor, and such funds of the State of New Mexico shall be deposited as directed by the State Land Commissioner, to be held as unearned money pending final settlement of the title dispute, and then applied as earned or returned in accordance with such final settlement.

Unit Operator as such is relieved from any responsibility for any defect or failure of any title hereunder.

29. NON-JOINDER AND SUBSEQUENT JOINDER. If the owner of any substantial interest in a tract within the unit area fails or refuses to subscribe or consent to this agreement, the owner of the working interest in that tract may withdraw said tract from this agreement by written notice to the Director, the State Land Commissioner, and the Unit Operator prior to the approval of this agreement by the Director. Any oil or gas interests in lands within the unit area not committed hereto prior to submission of this agreement for final approval may thereafter be committed hereto by the owner or owners thereof subscribing or consenting to this agreement, and, if the interest is a working interest, by the owner of such interest also subscribing to the unit operating agreement. After

operations are commenced hereunder, the right of subsequent joinder, as provided in this section, by a working interest owner is subject to such requirements or approvals, if any, pertaining to such joinder, as may be provided for in the unit operating agreement. After final approval hereof, joinder by a non-working interest owner must be consented to in writing by the working interest owner committed hereto and responsible for the payment of any benefits that may accrue hereunder in behalf of such non-working interest. Joinder by any owner of a non-working interest, at any time, must be accompanied by appropriate joinder by the owner of the corresponding working interest in order for the interest to be regarded as committed hereto. Joinder to the unit agreement by a working interest owner, at any time, must be accompanied by appropriate joinder to the unit operating agreement, if more than one committed working interest owner is involved, in order for the interest to be regarded as committed to this unit agreement. Except as may otherwise herein be provided, subsequent joinders to this agreement shall be effective as of the first day of the month following the filing with the Supervisor, the State Land Commissioner and the State Commission of duly executed counterparts of all or any papers necessary to establish effective commitment of any tract to this agreement unless objection to such joinder is duly made within sixty (60) days by the Director; provided, however, that as to State Lands such subsequent joinder must be approved by the State Land Commissioner.

30. COUNTERPARTS. This agreement may be executed in any number of counterparts, no one of which needs to be executed by all parties, or may be ratified or consented to by separate instrument in writing specifically referring hereto and shall be binding upon all those parties who have executed such a counterpart, ratification or consent hereto with the same force and effect as if all such parties had signed the same document and regardless of whether or not it is executed by all other parties owning or claiming an interest in the lands within the above-described unit area.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed and set opposite their respective names the date of execution.

SHELL OIL COMPANY

By \_\_\_\_\_

Attorney in Fact

Address: P. O. Box 1509  
Midland, Texas 79704

UNIT OPERATOR AND WORKING INTEREST OWNER

ATTEST:

\_\_\_\_\_  
Date \_\_\_\_\_

GULF OIL CORPORATION

By \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Date \_\_\_\_\_

SOUTHERN UNION PRODUCTION COMPANY

By \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Date \_\_\_\_\_

THE SUPERIOR OIL COMPANY

By \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Date \_\_\_\_\_

SKELLY OIL COMPANY

By \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

E. E. FOGELSON

\_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

GAYLE D. FOGELSON

\_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

GEORGE H. HUNKER, JR.

\_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_

T. T. SANDERS, JR.

Address \_\_\_\_\_  
\_\_\_\_\_

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, on this day personally appeared J. V. LINDSEY, known to me to be the person whose name is subscribed to the foregoing instrument as Attorney in Fact for SHELL OIL COMPANY, a Delaware corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_ County, New Mexico

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed to the foregoing instrument as \_\_\_\_\_ of GULF OIL CORPORATION, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_ County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed to the foregoing instrument as \_\_\_\_\_ of SOUTHERN UNION PRODUCTION COMPANY, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
\_\_\_\_\_ County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed to the foregoing instrument as \_\_\_\_\_ of THE SUPERIOR OIL COMPANY, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, on this day personally appeared \_\_\_\_\_, known to me to be the person whose name is subscribed to the foregoing instrument as \_\_\_\_\_ of SKELLY OIL COMPANY, a corporation, and acknowledged to me that he executed the same for the purposes and consideration therein expressed, and in the capacity therein stated.

Given under my hand and seal of office this \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_ X  
COUNTY OF \_\_\_\_\_ X

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared E. E. FOGELSON, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared GAYLE D. FOGELSON, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared GEORGE H. HUNKER, JR., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

THE STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

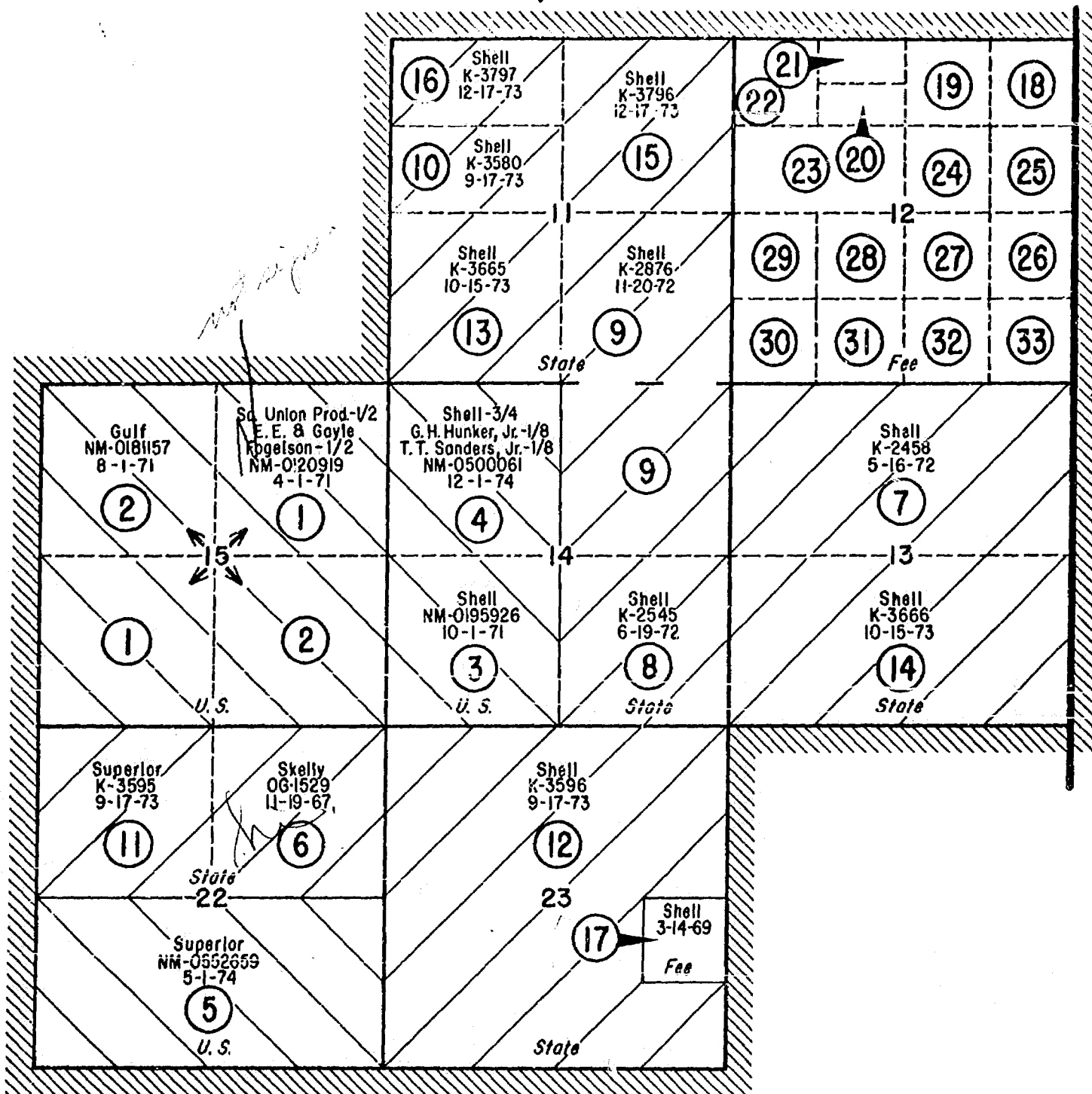
Before me, the undersigned authority, a Notary Public in and for said County and State, on this day personally appeared T. T. SANDERS, JR., known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

Given under my hand and seal of office this the \_\_\_\_ day of \_\_\_\_\_, 1965.

My Commission Expires: \_\_\_\_\_

\_\_\_\_\_  
Notary Public in and for  
County, \_\_\_\_\_

T-23-S, R-34-E



○	TRACT NUMBER		
▨	UNIT OUTLINE		
▧	FEDERAL LAND	1280 ACRES	28.57%
▩	STATE LAND	2520 ACRES	56.25%
□	FEE LAND	680 ACRES	15.18%
		4480 ACRES	100.00%

NORTH ANTELOPE RIDGE UNIT AREA  
LEA COUNTY, NEW MEXICO

EXHIBIT "A"



DRAFT

JMD/esr

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. 3354

Order No. R-3015

APPLICATION OF SHELL OIL COMPANY  
FOR APPROVAL OF THE NORTH ANTELOPE RIDGE  
UNIT AGREEMENT, LEA, COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on  
December 14, 1965, at Santa Fe, New Mexico, before Examiner  
Elvis A. Utz.

NOW, on this day of December, 1965, 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, Shell Oil Company,  
seeks approval of the North Antelope Ridge Unit Agreement  
covering 4480 acres, more or less, of State,  
Federal lands  
and Fee  
described as follows:

LEA COUNTY, NEW MEXICO  
TOWNSHIP 23 SOUTH, RANGE 34 EAST, NMPM  
Section 11: All  
Section 12: All  
Section 13: All  
Section 14: All  
Section 15: All  
Section 22: All  
Section 23: All

(3) That approval of the proposed unit agreement should promote the prevention of waste and the protection of correlative rights within the unit area.

IT IS THEREFORE ORDERED:

(1) That the North Antelope Ridge Unit Agreement is hereby approved.

(2) That the plan contained in said unit agreement for the development and operation of the unit area is hereby approved in principle as a proper conservation measure; provided, however, that notwithstanding any of the provisions contained in said unit agreement, this approval shall not be considered as waiving or relinquishing, in any manner, any right, duty, or obligation which is now, or may hereafter be, vested in the Commission to supervise and control operations for the exploration and development of any lands committed to the unit and production of oil or gas therefrom.

(3) That the unit operator shall file with the Commission an executed original or executed counterpart of the unit agreement within 30 days after the effective date thereof; that in the event of subsequent joinder by any party or expansion or contraction of the unit area, the unit operator shall file with the Commission within 30 days thereafter counterparts of the unit agreement reflecting the subscription of those interests having joined or ratified.

(4) That this order shall become effective upon the approval of said unit agreement by the Commissioner of Public Lands for the State of New Mexico and the Director of the United States Geological Survey; that this order shall terminate ipso facto upon the termination of said unit agreement; and that the last unit operator shall notify the Commission immediately in writing of such termination.

(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.