Case Number 4762

Application

Trascripts

Small Exhibits

ETC.

11

12

13

14

15

17

18

ĺŷ

21

22

23

24

25

MMS BLDG. + P.O. BOX 1092 + PHONE 243-6691 • ALBUQUERQUE. NEW MEXICO 87103 116 first national bank bldg. East • Albuquerque, new mexico 87108 MR. STAMETS: Case 4762.

MR. HATCH: Case 4762: Application of Shell Oil Company for an unorthodox location and simultaneous dedication, Lea County, New Mexico.

Andrews, Hannahs and Morris of Santa Fe, appearing on behalf of Shell Oil Company. We have one witness that we ask be sworn in Case 4762.

### JAMES E. SULLIVAN,

was called as a witness, and after being duly sworn, testified as follows:

### DIRECT EXAMINATION

### BY MR. BUELL:

Q Would you state your name, please?

A James E. Sullivan, 2814 Marriana, Midland, Texas.

Q By whom are you employed and in what capacity?

A I am employed by the Shell Oil Company as a senior engineering assistant.

Q Have you previously testified before this Commission?

20 A No, I haven't.

Q Would you please give the Commissioner some background as to your education and work?

A I have a bachelor of arts' degree from Kilroy College,
and twenty-six additional hours of business administration
from Odessa College, and I have been employed with

the Shell Oil Company as a senior engineering assistant

# dearnley, meier & mc cormick

	2	for a second sec
	2	approximately eleven years. My experience
	3	includes rour years as a field engineer dealing with
	4	drilling and evaluation. Then for the last five
	5	years, I have been in charge of proration in the states
	6	
	7	Q Do your duties with Shell include work in the Antelope
	8	Ridge Unit?
	9	A Yes.
	10	Q What do you do there?
	11	A Developing wells that we have already drilled and
	12	drilling additional wells.
7108	13	MR. BUELL: Are the witness' qualifications
NEW MEXICO 87103 MEXICO 87108	14	acceptable?
. ≩	15	MR. STAMETS: Yes, they appear to be.
りかい 南本 かい ない ない ない ない という と は と と は と は と は と は と	16	Q (By Mr. Buell) Are you familiar with what Shell seeks
• A L B L	17	in this application?
43-6691 STOAL	18	A Yes. I am.
PHONE 2	19	O Would you briefly tell the Examiner what is sought?
0 8 2 A A A A A A	20	A Shell Oil Company seeks authority to deepen its
~ E	21	Antelope Ridge Well Number Four to the Antelope Ridge-
0 E	22	Morrow Gas Pool at an unorthodox location 990 feet from
MS BLD 6 F!RST	23	the north line and 2,310 feet from the east line of
209 SIMI 121	24	Section Four, Township 24 South, Range 34 East, Lea
	25	County, New Mexico. This location is approximately
209 SIMMS BLDG. • P.O. BO) 1216 FIRST NATIONAL	24	Section Four, Township 24 South, Range 34 East, Lea

# dearnley, meier & mc cormick

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

800 feet from its Antelope Ridge Well Number Two. located 660 feet from the north line and 1650 feet from the east line of the same pool, township, and lange. Shell seeks to simultaneously dedicate the north half or Section Four to the two wells. Referring you to what has been marked as Applicant's

Exhibit One, would you briefly explain what that shows? Exhibit One shows the outline of the Devonian and Morrow participating areas. The Devonian is the heavy black line and the Morrow is the small dash line. It also shows the subject well circled in red. The plat also shows the well in the east half of the section. which is presently a dual Morrow-Devonian producer. Because of downhole mechanical problems, we are presently producing from the Devonian and Morrow comingled downhole. This was permitted by way of Order R-289 in Case 4690.

In our Number Two Well, we are experiencing severe production decline from the Morrow and we plan to abandon the Morrow Zone and produce the Number Two Well from a single zone as a Devonian producer.

The only other Morrow producer is in Section Twenty-Seven, and we need an effective drainage point for the Morrow in the south end of the pool, or Section Number Four.

₹10

Ω	Do you have	any inform	ation on	the	Number	Four	Well
	and your re-	entry into	that wel	.1? '			

Well Number Four is presently shut in, and this well has been shut in since September, 1968, due to high water production. The total depth of the well is 12,375 feet with casing set at 5,167 feet. There is five and a half inch casing set at 12,500 feet, and we have a four-inch pump from 11,923 to 12,375 feet, the total depth of the well. The liner is not cemented in, and the liner is shown at 12,341, and that is where the Atoka is producing from.

We plan to re-enter the Number Four Well at 11,635 feet and expect to recover the four-inch liner. Now, if we are unable to recover the liner, we plan to drill a four and three-quarter inch hole to 13,320 feet for a total of 945 feet of new hole.

MR. STAMETS: 13,320?

THE WITNESS: Yes, sir, 13,320 will be the total depth of the new hole.

(Continuing) Then we plan to run cementing from a three and a half inch flush joint liner and complete it from there. I would like to point out that we do have purchasers for the gas, and it is possible, and we hope that this well will act as an additional pressure relief for Well Number Two. We are not certain that

		1		it will, but it is possible.
		2	Ω	Referring to what has been marked as Exhibit Two, would
- <u>Ş</u> İ.		3		you please explain that?
		4	λ	Exhibit Two is the drilling cost versus the deepening
		5		obse of the shell impolope hauge well number Four.
쑹		6		The comparison of the cost between the actual deepening
dearnley, meier & mc cormick		7		of Well Number Four as we propose as opposed to the
ಶ		8	\$	drilling of a new well in an orthodox location, those
& <b>□</b>		9		figures on the left show the cost of deepening Well
Zei.	<u>.</u>	10		Number Four, and they show that it will cost a total
∭	7	11		of \$120,000, which we feel is a reasonable figure.
rnle	XICO 87103 87108	12		In the \$120,000, if we are able to recover the four-
9		13	·	inch liner, we could save an additional \$10,000. This
	EX XE	14		is opposed to the \$507,000 it would cost to drill a
	. ≯ tal tal ⊃ Z O' .	15		new hole. And also there is no value attributed to
	1082-PHONE 243-6691-ALBUQUER ANK BLDG. EAST-ALBUQUERQUE	16		the risk factor of drilling a new hole in this figure
		17		either.
		18	Q	Were Exhibits One and Two prepared by you or under
		19		your supervision?
		20	A	e <b>Yes.</b> Handa ayan ayan ayan ayan ayan ayan ayan
	NATIONAL B	21	Q	Is it your opinion that the granting of this application
	0 E 4 Z	22		would prevent waste and protect correlative rights?
 	SIMMS BLDG.	23	A	Yes, sir. It would prevent waste since it could
	209 SIM	24		effectively drain the 320 acres and correlative rights
		25	:	will not be affected since Shell is the only operator

dearnley, meier & mc cormick

8

10

11

12

13

14

15

16

17

18

19

**2**0

21

22

23

24

in the area.

MR. BUELL: At this time, I would like to move for the introduction of Exhibits One and Two.

> MR. STAMETS: Are there any objections to the ion of these exhibito:

(No response)

MR. STAMETS: They will be so introduced.

(Whereupon Applicant's Exhibits 1 and 2 were admitted in evidence.)

MR. BUELL: I have nothing further.

### CROSS EXAMINATION

### BY MR. STAMETS:

Mr. Sullivan, if I understood you correctly, you said that the Morrow Zone in the Number Two Well will be squeezed off when the high pressure problem is overcome?

- Yes, it will, and we will make a single Devonian Well at that time.
- Q And the Number Four Well is being shut in because of the high water content, and you have essentially a dry hole there at this time?
- Yes, this has been this way since September, 1968.
- I don't believe that you gave me the top and bottom of the three and a half inch liner, and whether that was to be cemented in the hole.

Our tentative plans are to hang the liner 11,920 and

MR. STAMETS: Are there any other questions of

MR. HATCH: Is the north half presently dedicated

we do plan to cement the liner.

this witness?

ű

-DG.+P.O. BOX 1092-PHONE 243-6691-ALBUQUERQUE, NEW MEXICO 87103 St national bank bldg. Kast-Albuquerque, new Mexico 87108 dearnley, meier & mc cormick

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

STATE OF NEW MEXICO SS COUNTY OF BERNALILLO )

I, RICHARD E. McCORMICK, a Certified Shorthand Reporter, 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.

209 SIMMS BLDG. # P.O. BOX 1092 # PHONE 249-6691 # ALBUQUERQUE. NEW MEXICO 87103 (216 FIRST NATIONAL BANK BLDG. EAST # ALBUQUERQUE, NEW MEXICO 87108

i do hereby consisty that the seriesting is a secondary remain or the productings in the beauties hearing of this to HIGZ.

Her Kesico Oil Convervation Commission

	1		INDEX		
	2	WITNESS		PAGE	
<u> </u>	3	JAMIN E. BULLIVAN			
	4	Direct Examin	ation by Mr. Buell	3	
7 - 7 5 - 7 5 - 7	5	Cross Examina	tion by Mr. Stamets	8	÷
<u> </u>	6		and the second s		
Ē	7				
ည	8	*			
8	9		en e		n and some management of the same of pages that sames
eier	10				
dearnley, meier & mc cormick	11		EXHIBITS		
E s	12	APPLICANT'S	ADMITTED	OFFERED	
dearn	13	Exhibit l	8	5	,
# ₹ ₹ ₹ 0 0 ×	- 14	Exhibit 2	8	7	
Z ∑ ₩ 2 X X	15				
ALBUQUERQUE. UQUERQUE. NEW	16	.4.7			
	17 18				
209 SIMMS BLDG.•P.O. BOX 1092.•PHONE 243-6691• 1216 FIRST NATIONAL BANK BLDG. KAST •ALB	<u>1</u> 9 20				
• P.O. 00 X	21 22				
IMS BLDG.	23			100 (100 (100 (100 (100 (100 (100 (100	
209 SIM	24		V		
	25				



## OIL CONSERVATION COMMISSION

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

BRUCE KING CHAIRMAN LAND COMMISSIONER

GOVERNOR

ALEX J. ARMIJO MEMBER

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

July 25, 1972

	Re:	Case No	4762
Mr. Sumner Buell Montgomery, Federici, And	drews.	Order No.	•
Hannahs & Morris		Applicant	
Attorneys at Law	; , i		
Post Office Box 2307 Santa Fe, New Mexico		Shell 01	1 Company
Dear Sir:			
Enclosed herewith are two Commission order recently			
		- <u>_</u>	
en e	_	ruly yours,	
	a	L Fortu	
		ORTER, Jr.	
	Secreta	ry-Director	The state of the s
		ge v	
ALP/ir		en e	en e
Copy of order also sent	to:		
Hobbs OCC X			·
Artesia OCC			ing the state of t
Aztec OCC			
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. 4762 Order No. R-4350

APPLICATION OF SHELL OIL COMPANY FOR AN UNORTHODOX LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 12, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 25th day of July, 1972, 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, is the owner and operator of the Antelope Ridge Unit Well No. 4 in Unit B, 990 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 34 East, Lea County, New Mexico.
- (3) That the applicant is also the owner and operator of the Antelope Ridge Well No. 2, also located in Unit B of said Section 4 at a point 660 feet from the North line and 1650 feet from the East line of the section; that Order No. R-4289 authorized the applicant to commingle gas production from the Antelope Ridge-Morrow and Antelope Ridge-Devonian Gas Pools in the well-bore of said well No. 2 for a period of one year or until the well is repaired, whichever occurs first.
- (4) That said Well No. 4 formerly produced gas from the Antelope Ridge-Atoka Pool and is now shut-in due to excessive water production from the Atoka formation.
- (5) That the applicant seeks authority to deepen said Well No. 4, at its unorthodox location, and to complete the well as a gas producer in the Antelope Ridge-Morrow Pool. Applicant further seeks to simultaneously dedicate the north half of Section 4, Township 24 South, Range 34 East, Lea County, for

CASE NO. 4762 Order No. R-4350

Morrow gas production from said Well No. 4 and its above-described Antelope Ridge Unit Well No. 2.

- (6) That the production of Antelope Ridge Unit Well No. 4 and Well No. 2 in the same unit will facilitate a pressure decline in said Well No. 2 thus permitting the repair of a down hole communication problem in Well No. 2.
- (7) That approval of the application will protect correlative rights and prevent waste.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Shell Oil Company, is hereby authorized to deepen its Antelope Ridge Unit Well No. 4 at an unorthodox location 990 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico, to complete said well as a Morrow gas producer in the Antelope Ridge-Morrow Pool.
- (2) That the applicant is further authorized to simultaneously dedicate for Morrow production the north half of said Section 4 to said Well No. 4 and its Antelope Ridge Unit Well No. 2, located 660 feet from the North line and 1650 feet from the East line of said Section 4.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary,

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

While a China

ALEX J, ARMIJO, Member

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

SEAL

dr/

- Application of Atlantic Richfield Company for a special gas-oil ratio limitation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to Rule 506 of the Commission Rules and Regulations, a limiting gas-oil ratio limitation of 6,000 cubic feet of gas per barrel of oil in the Justis Tubb-Drinkard Pool, Lea County, New Mexico.
- (Continued from the June 7, 1972 Examiner Hearing) CASE 4732: Application of Continental Oil Company for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Skaggs-Glorieta, East Weir-Blinebry, and Skaggs-Drinkard Pools in the wellbore of its Skaggs "B" Well No. 5 located 990 feet from the North line and 1700 feet from the West line of Section 12, Township 20 South, Range 37 East, Lea County, New Mexico.
- Application of Anadarko Production Company for a waterflood project, Lea CASE 4760: County, New Mexico. Applicant, in the above-styled cause, seeks to institute a waterflood project by the injection of water into the Penrose-Skelly Pool by the injection of water through its R. E. Cole Well No. 3 located in the SW/4 SW/4 of Section 16 and its E. W. Walden Well No. 6 located in the SE/4 SW/4 of Section 15, Township 22 South, Range 37 East, Lea County, New Mexico.

Applicant further seeks establishment of a procedure whereby the conversion of additional wells to injection may be approved administratively.

- Application of Shell Oil Company for an unorthodox location, Lea County, CASE 4761: New Mexico. Applicant, in the above-styled cause, seeks authority to drill a well at an unorthodox location 1980 feet from the South line and 660 feet from the East line of Section 33, Township 23 South, Range 34 East, Antelope Ridge-Devonian Gas Pool, Lea County, New Mexico.
  - Application of Shell Oil Company for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to deepen its Antelope Ridge Well No. 4 to the Antelope Ridge-Morrow Gas Pool at an unorthodox location 990 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 34 East, Lea County, New Mexico, which location is approximately 800 feet from its Antelope Ridge Well No. 2 located 660 feet from the North line and 1650 feet from the East line, same pool, township and range. Applicant proposes to simultaneously dedicate the N/2 of said Section 4 to the two wells.
- Application of Black River Corporation for compulsory pooling and non-CASE 4763: standard proration unit, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks an order pooling all mineral interests in the Morrow formation underlying the E/2 of Section 3, Township 26 South, Range 24 East, adjacent to the Washington Ranch-Morrow Gas Pool, Eddy County, New Mexico, comprising, approximately, a 409.22-acre non-standard proration unit. Said acreage to be dedicated to its Cities "3" Federal Well No. 2 located 2212 feet from the North line and 1998 feet from the East line of said Section 3.

CASE 4762:

# 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. 4690 Order No. R-4289

APPLICATION OF SHELL OIL COMPANY FOR DOWNHOLE COMMINGLING, LEA COUNTY, NEW MEXICO.

GRDER-OF THE-COMMISSION-

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on April 5, 1972, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 17th day of April, 1972, 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, is the owner and operator of the Antelope Ridge Well No. 2, a dual completion, located in Unit B of Section 4, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That pursuant to authority granted by Order No. R-2787 the subject well was completed as a dual completion (conventional) to produce gas from the Antelope Ridge-Morrow Pennsylvanian and Antelope Ridge-Devonian Gas Pools.
- (4) That communication between the two zones developed in the Fall of 1971.
- (5) That the applicant has made diligent efforts to repair the well.
- (6) That during the efforts to repair the well a new high pressure zone in the Morrow formation was opened to the well-bore which makes workover attempts extremely hazardous.
- (7) That the new high pressure Morrow zone is believed to be of limited extent.

- (8) That the applicant should be allowed to produce the well, comminging in the well-bore the production from the Devonian and Morrow zones, for one year or until such time as gas pressures have decreased to such an extent that the well can be safely repaired, whichever occurs first.
- (9) That the applicant proposes to allocate production to each of the commingled zones upon the basis of the H<sub>2</sub>S content of the commingled stream as compared to the H<sub>2</sub>S content of the Devonian gas from its Antelope Ridge Well No. 3 located in Unit K of Section 34, Township 23 South, Range 34 East.
- (10) That the reservoir characteristics of the Antelope Ridge-Morrow Pennsylvanian and Antelope Ridge-Devonian zones in the subject well are such that underground waste would not be caused by the proposed commingling in the well-bore.
- (11) That approval of the subject application will prevent waste and protect correlative rights.

### IT IS THEREFORE ORDERED:

(1) That the applicant, Shell Oil Company, is hereby authorized to produce its Antelope Ridge Well No. 2, located in Unit B of Section 4, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico, in such a manner as to produce gas from the Antelope Ridge-Morrow Pennsylvanian and Antelope Ridge-Devonian Gas Pools, commingling in the well-bore the production from said zones.

PROVIDED HOWEVER, that the operator shall so produce the subject well for a period of one year or until such time as gas pressures have decreased to such an extent that the well can be safely repaired, whichever occurs first.

- (2) That the commingled production shall be allocated to the Antelope Ridge-Morrow Pennsylvanian and Antelope Ridge-Devonian zones upon the basis of the H<sub>2</sub>S content of the commingled stream as compared to the H<sub>2</sub>S content of the Devonian gas from its Antelope Ridge Well No. 3 located in Unit K of Section 34, Township 23 South, Range 34 East, NMPM, as determined by gas analyses conducted at least once each month.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

CASE NO. 4690 Order No. R-4289

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

BRUCE KING, Chairman

ALEX J. ARMIJO, Member

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

S E Á L

### DRILLING COST-V-DEEPENING COST SHELL ANTELOPE RIDGE NO. 4 MORROW TEST

DRILLING SITE		\$ 2,000		\$ 4,000
DRILLING COST Install and Remove Rig Rig Cost Drilling Mud Surface & Protective Casing & Cementing Miscellaneous Drilling Cost (Rental Equipment)	\$ 10,000 47,000 9,000		\$ 20,000 224,000 40,000 136,000 5,000	
TOTAL DRILLING COST	A	\$ 86,000		\$425,000
EVALUATION COST  Logging Testing Coring Rig Cost - Evaluation Miscellaneous Evaluation Cost	9,100 2,400 500		12,000 	
TOTAL EVALUATION COST		\$ 12,000		\$ 27,000
COMPLETION COST  Production Casing and Cementing Well Stimulation and Testing Rig Cost - Completion Miscellaneous Completion Costs	9,000 2,000 5,000 1,000		10,000 2,000 6,000 5,000	
TOTAL COMPLETION COST		\$ 18,000		\$ 23,000
TOTAL DRILLING WELL COSTS (Lines 1, 7, 13, 18)		\$118,000		\$479,000
PRODUCTION EQUIPMENT TO COMPLETE WELL Tubing, Other Subsurface and Wellhead Equipment	· · · · · · · · · · · · · · · · · · ·	\$ 2,000	: :	\$ 28,000
TOTAL DRILLING & COMPLETION COSTS (Lines 19-21)	- V <sub>1</sub> <sup>(1)</sup> • · · · · · · · · · · · · · · · · · · ·	\$120,000	•	\$507,000



IN THE MATTER OF THE APPLICATION OF SHELL OIL COMPANY TO DEEPEN ITS ANTELOPE RIDGE UNIT NO. 4 LOCATED IN SECTION 4, TOWNSHIP-24 SOUTH, RANGE 34 EAST, LEA COUNTY, NEW MEXICO, TO PRODUCE ANTELOPE RIDGE-MORROW-GAS POOL.

CASE NO. 4762

### APPLICATION

OF MUE SMAME OF MEH MEXTCO

Comes now the applicant, Shell Oil Company, and in support of its application herein states:

- 1. Shell Oil Company is the operator of the Antelope Ridge Unit comprising Sections 27, 28, 33 and 34, Township 23 South, Range 34 East, and Section 3 and 4 of Township 24 South, Range 34 East, Lea County, New Mexico.
- 2. Shell Oil Company has drilled its Antelope Ridge No. 4 to a total depth of 12,375 feet to the Antelope Ridge-Atoka Gas Pool as created by Order No. R-3050. Said well is located 990 feet from the north line and 2,310 feet from the east line of Section 4, Township 24 South, Range 34 East.
- 3. Applicant proposes to deepen its Antelope Ridge No. 4 to approximately 13,320 feet in order to produce from the Antelope Ridge-Morrow Gas Pool as created by Order No. R-3050.
- 4. Applicant is presently producing from the Morrow Zone through its Antelope Ridge No. 2, pursuant to Order No. R-4289, which well is located 660 feet from the north line and 1,650 feet from the east line of Section 4, Township 24 South, Range 34 East, Lea County, New Mexico. However, irreparable permeability damage has been done to the Morrow Zone in this well due to recent downhole communication problems.

DOCKEL WVERD

Defination 30-16

- 5. The Antelope Ridge Unit No. 2 and Antelope Ridge Unit No. 4 wells are located approximately 000 feet from each other.
- by allowing the recovery of otherwise unrecoverable gas reserves in the Morrow Zone and will prevent the drilling of unnecessary wells.
- 7. The granting of this application will prevent waste and protect correlative rights.

Respectfully submitted,

MONTGOMERY, FEDERICI, ANDREWS, HANNAHS & MORRIS

By P. O. Box 2307 Santa Fe, New Mexico 87501

Attorneys for Applicant Shell Oil Company RLS/dr

OF THE STATE OF NEW MEXICO

AM

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

CASE No. 4762

Order No. R- 4350

APPLICATION OF SHELL OIL COMPANY FOR AN UNORTHODOX LOCATION AND SIMULTANEOUS DEDICATION, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 12 , 1972 at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of July, 1972, 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, is the owner and operator of the Antelope Ridge Unit Well No. 4 in Unit B, 990 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 34 East, Lea County, New Mexico.

of the antelope Ridge well to 2 located in resident of the antelope Ridge well to 2 located in resident to of that Order than and 1650 but from the Box said lection 45 that Order to. R- 4289 authorized the applicant to comminde sour perduction from the antelope Ridge hourses fools in the well-bore of said well no. 2 for a period of one year or intel the well is repaired, whichever occurs first.

a of the earthory

-2-CASE NO. 4762 Order No. R-

- (3) That said Well No. 4 formerly produced gas from the Antelope Ridge-Atoka Pool and is now shut-in due to excessive water production from the Atoka formation.
- Well No. 4, at an unorthodox location, and to complete the well as a gas producer in the Antelope Ridge-Morrow Pool. Applicant further seeks to simultaneously dedicate the north half of Section 4, Township 24 South, Range 34 East, Lea County, for Morrow gas production from said Well No. 4 and its Antelope Ridge Unit Well No. 2 also leasted in Unit B of said section 4.
- and Well No. 2 in the same unit will facilitate a pressure decline in said Well No. 2 thus permitting the repair of a down hole communication problem in Well No. 2 by the plugging off of the Morrow formation in said well being the subject of Commission Case No. 4690 and Order No. R 4289.
- (%) That approval of the application will protect correlative rights and prevent waste.

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Shell Oil Company, is hereby authorized to deepen its Antelope Ridge Unit Well No. 4 at an unorthodox location 990 feet from the North line and 2310 feet from the East line of Section 4, Township 24 South, Range 34 East, NMPM, Lea County, New Mexico, to complete said well as a Morrow gas producer in the Antelope Ridge-Morrow Pool.
- (2) That the applicant is further authorized to simultaneously for more productive dedicate the north half of said Section 4 to said Well No. 4 and its Antelope Ridge Unit Well No. 2, located 660 feet from the North line and 1650 feet from the East line in same pool, Township and Range.

CASE NO. 4762 Order No. R-

entry of such further orders as the Commission may deem necessary.

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

porthe half dedecated Mor-Des Dua 1650 PBTO 14990 Part Mos 12898-131 #4 Atoka TO 12 875

1,

RIVER CORPORATION FOR COMPULSORY POOLING, EDDY COUNTY, NEW MEXICO.