CASE 5720; HARVEY E. YATES FOR AN EXCEPTION TO ORDER NO. R-3221, CEDDY COUNTY, NEW MEXICO

CASE NO.

5720

APPlication, Transcripts, Small Exhibits,

ETC.

CASES 5719, 5720, 5721, 5722 and 5723 were consolidated. All exhibits and the transcripts may be found in Case File 5719

Page	1

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION Santa Fe, New Mexico January 17, 1977

COMMISSION HEARING

IN THE MATTER OF:

Applications of La Rue and Muncy,
Harvey E. Yates, H & S Oil Company,
Gene Snow and Marbob Energy Corporation)

for exception to Order No. R-3221,

5721

BEFORE: Joe D. Ramey, Director Emery C. Arnold, Member Phil R. Lucero, Member

Eddy County, New Mexico.

Richard L. Stamets

TRANSCRIPT OF HEARING

APPEARANCES

For the New Mexico Oil

Lynn Teschendorf, Esq.

Conservation Commission:

Legal Counsel for the Commission:

Conservation Commission: Legal Counsel for the Commission State Land Office Building Santa Fe, New Mexico

For the Applicants:

A. J. Losee, Esq.
LOSEE & CARSON, P.A.

Attorneys at Law
300 American Home Building

Artesia, New Mexico

sid morrish reporting service
General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

18 For the Applicant

21

20

10

11

12

13

14

15

16

17

2223

24

25

D	2	
Page	_ _	

INDEX

2		Page
3	EDWARD E. KINNEY	
4	Direct Examination by Mr. Losee	4
5	Cross Examination by Mr. Stamets	26
6	Cross Examination by Mr. Ramey	28
7	Cross Examination by Mr. Arnold	30
8		
9		
10		

EXHIBIT INDEX

		Offered	Admitted
Applicants'	Exhibit One, Map	5	26
Applicants'	Exhibit Two, Photos	11	26
Applicants'	Exhibit Three, Map	15	26
Applicants"	Exhibit Four, Map	15	26

sid merrish reporting service

General Court Reporting Service
825 Calle Mejia. No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

5

8

10

11

12

13

14

15

16

17

18

19

21

22

23

24

25

MR. RAMEY: The hearing will come to order. We will call the first case on the docket.

MS. TESCHENDORF: Do you want us to call them all, sir?

MR. LOSEE: Yes.

MS. TESCHENDORF: We will consolidate Cases 5719, 5720, 5721, 5722 and 5723 for purposes of testimony and these are the applications of La Rue and Muncy, Harvey E. Yates, H & S Oil Company, Gene Snow and Marbob Energy Corporation for an exception to Order No. R-3221, Eddy County, New Mexico.

MR. RAMEY: I'll ask for appearances.

MR. LOSEE: A. J. Losee appearing on behalf of the applicants. I have one witness, Mr. Ed Kinney.

MR. RAMEY: Would you swear the witness?

(THEREUPON, the witness was duly sworn.)

MR. LOSEE: I would like to apologize for our tardiness in appearance this morning and hope in view of the brevity of our presentation that it will be forgiven.

I'm not sure that counsel for the Commission did move but I would like to move to consolidate these cases for purposes of hearing and have the record so show.

MR. RAMEY: That will be fine, Mr. Losee, to consolidate.

EDWARD E. KINNEY

called as a witness, having been first duly sworn, was

0	Λ	
Page	7	

1 examined and testified as follows:

DIRECT EXAMINATION

BY MR. LOSEE:

2

3

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

- Would you state your name, residence and occupation?
- A. Edward E. Kinney, I reside in Artesia, New Mexico,
 I'm a consultant in oil and water matters in Artesia.
- A Have you previously testified before this Commission and had your qualifications accepted as a geologist and an expert in water matters?
- A. I have previously testified before this Commission with regards to oil matters, not as to water matters in particular.
- Q. Would you give the Commission some of your -- first your educational background in connection with water matters?
- A. I studied ground water under Tollman at Stanford
 University and I have worked on the City of Carlsbad water
 case a couple of years ago and I have appeared in several cases
 before the State Engineer as an extension witness in water
 matters.

MR. LOSEE: Are Mr. Kinney's qualifications acceptable?

MR. RAMEY: Yes, we will consider him qualified.

- Q (Mr. Losee continuing.) Would you state the purpose of this application in these four cases or applications?
- A. The purpose of these applications is to seek variance to the regulations to permit the disposition of or disposal of

sid morrish reporting service General Court Reporting Service Calle Mejia, No. 122, Santa Fe, New Mexico 87: Phone (505) 982-9212

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

2

10

11

12

16

17

18

19

20

21

23

24

25

produced oil field waters into unlined earthen pits.

- Q. How many wells, Mr. Kinney, are involved?
- A Twelve wells, to the best of my recollection.
- Q. How many pits?
- A Seven pits.
- Q Now, you are aware that this is a De Novo proceeding and the prior orders of the Commission in these cases denied the applications, are you not?
 - A. Yes, sir.
- Q Would you briefly explain the findings in those orders?
- A. In the previous hearings fresh water was determined to be in the vicinity of the pits. It was also determined that surface drainage was away from the fresh water but no determination or no evidence was given as to subsurface draining, underground water movement and for that reason the application was denied.
- Okay, would you please refer to what has been marked as Applicants' Exhibit One and explain what is portrayed by this exhibit?
- A Applicants' Exhibit One is two maps of the USGS topographic series, one labeled Oil City, the other Clayton Basin, that have been joined together to form one map covering the area adjacent to the leases held by the various parties in these cases.

What does the yellow area indicate?

- A. The yellow area is a coloring between the thirty-five hundred and thirty-five ten contour, surface contour on these maps for the purpose of showing the surface structure of the area, to show the Loco Hills Ridge, the Nimenim Ridge and the valleys in between.
 - Q Okay, now, the brown is also --
- A The brown is also for the same purpose, it is the contour interval between thirty-four fifty and thirty-four sixty to give a little more depth to the outline of the geography.
- Q. Okay, now, where does the Loco Hills Ridge run with respect to these wells which are the subject of this application?
- A The Loco Hills Ridge starts in Section 5 of Township

 19 South, Range 29 Fast -- wait a minute, it's 30 East,

 excuse me -- and proceeds north by northeast right through the

 center of the H & S property, the La Rue and Muncy property.

Most of the leases lie to the west of this ridge, with just the two, the H & S and the La Rue and Muncy lying on top of the ridge.

- Q. What are the red dots, what does that signify?
- A The red dots are the locations of the disposal pits presently on the leases.
- Q Now, with respect to those pits that lie west of the Loco Hills Ridge, where will they drain if they overflow?

17

18

19

20

21

22

23

A. If they overflow they will drain southerly and then somewhat southwesterly down into the area in Section 18 of Township 19 South, Range 30 East.

- Q In other words, southerly from the leases?
- A Southerly from the leases, yes, sir. The leases are in Sections 32 and 33 and the drainage will be to the south until you hit Section 8 and then kind of southwesterly into Section 18.
- Q Okay, now, I notice one of the pits is on top of the ridge, where will it drain?
- A. Essentially it is a flat area there and there is not much likelihood of any directional drainage. Let me say this in regard to the previous question that in the event of a hard rain, none of these pits are likely to overflow for the simple reason that each is located in a structural depression that is high enough to contain the water but lower than some of these contours that appear here. There is four or five feet of embankment, just natural depressions in the blow sand.
- Q Okay, now, Mr. Kinney, you were telling me what would happen to the water on top of the ridge?
- A. The water on the top of the ridge, it will just sink down into the sands. It's too flat there, I don't think that it will flow either way but if it did, part of it might go to the southeast and part might go to the southwest but essentially it would just sink right into the top of the

	^	
Page	8	

u MOLTISM reporting service General Court Reporting Service le Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

ridge there.

2

9

10

11

12

15

16

17

19

20

21

22

23

Q All right, now, one of the pits is located on the east side of that?

A Okay, that pit that is located on the east side of the Loco Hills Ridge will drain to the southeast into the the little depression that shows at the bottom of Section 34 and then if there is any excess it would tend to flow on down south toward the Amax Potash mine.

- Q Okay, now, is that opinion supported by the topography shown on this map?
 - A Yes, sir, by the contours.
- Q. Okay, now, you talked about the water sinking into the blow sand, at least with respect to the pit up on the ridge, what will happen to that water when it sinks into the blow sand?
- A The water that will sink into the blow sand or the dune sand will percolate downward until it comes to the top of the Redbed section, which is in some cases a few feet to a maximum of a very few tens of feet of blow sand there and then it will be discharged back into the atmosphere through evaporation and transpiration.
 - Okay, will the residue form any caliche-like --
- A. The solids contained in the water as it percolates downward will be precipitated as the waters evaporate and it will form a caliche-like hardened layer consisting of the

Page	9	

salts that were in the water.

- And that's going to occur, really, just a few feet
 below the surface?
- A Just a few feet below the surface and if any place, it will be right on top of the very fine-grained Dockum.
- Q Now, let me ask you from this map, would you point out the location of the only fresh water within three miles?
- A The fresh water on this map is located over where the arrow shows in Section 26 of the southeast quarter of Section 26. It says water well on the map and right at the end of it is a black dot representing a house, a ranch house at the Walters camp of the Snider Ranch and the water well is located right by the ranch house.
- Okay, now, would there be any surface drainage from these pits in the direction of that water well?
- A No, sir, there will not be any. The brown contours in there show too many high ridges and the contours can -- the geographic structure will cause the water to flow south or southwest or southeast but not north.
- Q Okay, now, I notice this is called Walters Lake up there in a northeasterly direction, is that actually a lake?
- A. Walters Lake and the little blue dot in the southeast corner of Section 22, a little blue dot in Section 26, all of these are intermittent lakes, dry lakes. After a heavy rain the water will stand for a short time but not permanently.

sid morrish reporting service

General Court Reporting Service
S Calle Mejia, No. 122, Santa Fe, New Mexico 8750
Phone (505) 982-9212

sid morrish reporting service Ceneral Court Reporting Service 825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

9

10

11

12

13

14

15

16

17

18

20

21

24

25

	<u> </u> 	Ø.		Okay, r	low,]	ne	otice	right	: up	opposite	that	Wa]	lters	
ı	1				area	by	which	you	have	written	Duva	ι.	What	is
1	locat	ed:	tł	nere?										

- A That's the north mine shaft and waste dump of the Duval Postash Company. Their main operation is further south on the Carlsbad Highway.
- Now, they have put the waste on the top of the ground,
 haven't they?
 - A. Yes, sir.
 - And you've got some pictures of it, have you not?
 - A. Yes, sir.
- Q Okay, now, south of the leases is another purple area which you have written Amax by the side of, what is located there?
- A That is the mill mine entrance and disposal pits, waste dumps of the Amax Potash Corporation.
 - Q Okay, now, how big is that waste dump?
- A. Well, the whole waste area there covers forty to eighty acres, waste dump and water disposal area around the Amax mine.
 - Q Are they discharging water into that pit there?
- 22 A. Yes, the underflow from their mill. The waste is 23 salt brine being discharged into a pit outside there.
 - MR. RAMEY: Excuse me, Mr. Losee, is that in Section 10 that you are talking about?

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Sania Fe, Now Mexico 87501 Phone (505) 982-9212

2

3

8

9

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

MR. LOSEE: Yes, sir.

A. Yes, all that purple area there. That purple area there is put on by the USGS, it's not mine.

\(\text{Mr. Losee continuing.} \) Now, is that waste water
 that they are putting in that pit more briney than the water
 produced in these oil wells?

- A Yes, sir, it's super saturated salt water.
- And what in relation to the volume?
- A The volume is many times greater, I don't know what their volume is but it will be many times greater than these wells produce.
- Okay, let me ask you to refer to what has been marked as Exhibit Two, being an envelope?

 (THEREUPON, a discussion was held

off the record.)

Q (Mr. Losee continuing.) Now, Mr. Kinney, this is

a series of pictures taken in that area, is it not?

- A. Yes, sir.
- Q Are these in numerical order?
- A Yes, sir.
 - Q Okay, if you will explain what area is shown by each picture and I will pass it up to the Commission.
 - All right, picture number two is a picture of the Snow Elk Lease on the northwest of the southwest of Section 32 and it shows the disposal pit which is a shallow depression in

d morrish reporting service

General Court Reporting Service

Mejia, No. 122, Santa Fe, New Mexico 8750
Phone (505) 982-9212

'he blow sand on the lease.

Picture three is a view from another angle of the same disposal pit on the Snow Lease.

- Q That lease is the most westerly lease?
- A. The most westerly lease of the group.

Well, they're not in numerical order, excuse me.

Picture number one is the Heyco pit in blow sand about nineteen eighty from the north and east of Section 32, 18 South,

30 East and it shows on this Exibit Number One as a dot in the center of the Heyco green lease there.

Picture number four is the northeast corner of the Heyco disposal pit in the center of their lease and shows the northeast corner, which would be right in the center of the picture, it shows the hummocky nature where the pits are located so that in the event of rainfall, excess rainfall, there isn't any way that it would get onto general drainage.

Picture number five is the Heyco disposal pit about sixty north and thirteen hundred east, Section 32, 18 South, 30 East. The pit is located in a depression, natural depression, in the terrain and will not flood into the main stream of the draw.

Picture number six is a picture of the Marbob disposal pit about twenty-three ten from the north and nine ninety from the west of Section 28, Township 18 South and Range 30 East in a low spot in the blow sand and it is in the center of the

sid morrish reporting service

General Court Reporting Service
alle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

picture with a small amount of caliche showing at the top, again in a structural depression.

Picture number seven is another view of the Marbob disposal pit and the pit is dug down into caliche and there is caliche around it and presumably in the bottom.

Picture number eight is Duval's waste dump at the north mine shaft in Section 22, Township 18 South, Range 30 East. The white appearing on the dump is the salt efflorescence. The Walters Lake as shown on the map in Exhibit One lies in the valley to the east or to the right of the dump in this picture.

pit on the top of the Loco Hills mesa, sixteen fifty from the north and twenty-three ten from the west of Section 33,

Township 18 South, Range 30 East. The pit is dug into caliche.

Picture number ten is the H & S Oil Company disposal pit about three thirty north and sixteen fifty west in Section 33, Township 18 South, Range 30 East. The pit is located in blow sand in an area swale.

Picture number eleven is the La Rue and Muncy disposal pit on the east side of the Loco Hills Ridge about sixteen fifty from the north and east of Section 33, Township 18 South, Range 30 East. The pit is located entirely in blow sand.

Picture number twelve is the area south and east of

the La Rue and Muncy east disposal pit, sixteen fifty north and east of Section 33 and the area is in a local swale, the flood waters will not reach the main valley.

- Q Mr. Kinney, you took those pictures yourself, did
 you not?
 - A Yes, sir.
- Q. And what general purpose are the pictures offered for?
- A The pictures are offered to show the exact nature of the rock in which the pits are located and also to depict as best pictures can the swales in which the pits are located.

MR. LOSEE: At this time, if the Commission please, we move to introduce the testimony and the exhibits in the original hearing before the Examiner in this case and particularly with respect to the pictures showing the Amax dump right to the south and east of these wells and also for the purpose of showing the water analysis from that pit and from these wells.

(THEREUPON, a discussion was held off the record.)

MR. RAMEY: That will be satisfactory, Mr. Losee, we will incorporate the record into this hearing.

Q (Mr. Losee continuing.) Will you refer to what has been marked as Exhibit Three, Mr. Kinney, and explain what is shown by this exhibit?

A. Exhibit Three is a map prepared by Hendricks and
Jones for geology and groundwater resources of Eddy County,
Groundwater Report Number Three published by the New Mexico
Bureau of Mines and Mineral Resources. It's called The General
Direction of Movement of Groundwater in Eddy County, New Mexico

water is desired to be produced and in the same colors, two shades of blue, red, green and orange in Township 18 Scuth, Range 30 East and the arrows on this map show the direction of groundwater movement. The arrows all point south in this area and show that the drainage will be to the south, possibly a little to the southwest and no drainage will go from the leases towards those lakes to the northeast.

- Q Do you have anything else to offer with respect to this exhibit?
 - A. No, sir.
- Q Please refer to what has been marked as Exhibit Number Four and explain what is shown on this exhibit?
- A. Exhibit Four is a map prepared by me showing the top of the Rustler in Township 18 South, Range 30 East.

The top of the Rustler or top of the anhydrite
as is particularly referred to as TA, is shown in all wells with
vertical lettering. Also shown on this are known fresh waters
from cable tool wells which are shown in numbers with a slant
and a line drawn under the number.

8id morrish reporting service

General Court Reporting Service

225 Calle Mejia, No. 122, Santa Fe, New Mexico 8750
Phone (505) 982-9212

The solid contour line on the map is the surface geography showing the Loco Hills Ridge on the left side and the Nimenim Ridge on the right side and the valley lying in between.

The dotted contour, there are just two contours, one at plus thirty-one hundred, the other at plus thirty-one fifty on the top of the Rustler or the top of the anhydrite, taken from electric logs in the area.

This shows a considerable reentrant right in Sections 27 and 28 over the whole to the west. We are dealing in this area with near the wedge edge of the Salada formation near the outcrop edge of the Rustler formation and we have local subsidence occurring you will note in Section 28 at the north half We have one elevation on the top of the anhydrite at plus thirty-one seventy-nine and one to the west of it at plus thirty-one ten with a regional dip being to the southeast in this whole area. That is an anomaly you also find down in the stippled area on Marbob where the top of the anhydrite is plus thirty-one twenty-four. These do not jibe with the higher elevations to the south and east, showing that we already have a certain amount of local subsidence due to solution of the Salada formation underlying the Rustler.

We also have instances shown further to the northwest where there is a non-uniformity of dip to the southeast.

Q. What effect does that have on the flow of water under

sid morrish reporting service

General Court Reporting Service
825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

9

11

12

13

14

15

16

17

18

19

21

22

23

24

25

ground?

A. Well, if there were any fractures being developed from the natural subsidence it would create some flows of water but there are none, there are no flows of water so that the natural subsidence hasn't affected the area in any way.

Q All right, now, the cable tool holes that you mentioned that found some fresh water, what horizon did they find the water in? It wasn't fresh water was it?

A. Some of it, yes. The water in the wells, there are five wells, two in Section 15 and two in Section 22 and one in Section 23, that all found some water that was fresher than the underlying Rustler water. It is from the Dockum group and it is sufficiently fresh that it can be used for livestock.

O Okay, now, is there any possibility of surface drainage from these wells up in that direction?

A. No, sir.

Q. What about subsurface?

A No, sir, the dip is in the opposite direction.

Q. Now, as a matter of fact, Mr. Kinney, isn't it true that that large mine deposit of Duval's lies in between those wells, those fresh water, and the leases that are in question here?

A. Yes, sir. One other fresh water well exists in Section 26 in the southeast quarter at the point where the data says plus thirty-two ten. The circle indicates the

10

11

13

14

15

16

17

19

20

21

22

25

approximate position of the water well where the full blue circle or the dark blue circle to the right of that would indicate the position of the intermittent fresh water lake at the Walters camp of the Snider Ranch.

- Q Ckay. Now, you've also got Walters Lake shown on this, again is that a --
- A. Walters Lake, the one I have shown on the map is the Walters Lake that is shown on the USGS topo sheet submitted as Exhibit Number One, in the position that they show it.
 - Q Is that a lake?
- A. It's an intermittent lake, a case where water impounds during flood seasons only.
 - Q It's not a permanent lake?
 - A It's not a permanent lake, no, sir.
- Q. Is there any drainage from surface or subsurface from the subject leases and pits towards Walters Lake?
- A. No, sir, the drainage is all to the south in this area and there will be no drainage from these leases to this Walters Lake nor to the Walters camp of the Snider Ranch.
- Q All right, now, you have mentioned the Dockum group, would you describe that group to the Commission, please?
- A. The Dockum group is a Triassic deposition overlying the Permian formations in this area, overlying the Permian Rustler formation. Starting at the bottom up it consists of three hundred and fifty feet of red sandy shale with a few

fine-grained sandstones, then two hundred to three hundred feet of gray and red sandstone with lenses of red shale and conglomerate and a bit of conglomerate at the top. Then three hundred feet or more of red shale with thin intermittent sandstones, all are covered by dune sands in this area and the actual outcrops are not readily seen.

- Q What does the red shale carry?
- A The red shale in this group are very fine grained with a high colloidal content which impedes water movement.
- What about, is there a physical barrier formed by
 this Dockum group?
- A These fine-grained shales, sandstones, mudstones, whichever word a person prefers to use, are known as an aquiclude, a-q-u-i-c-l-u-d-e. An aquiclude is a formation that holds the water but will not transmit sufficient water to support a seep or fill a well and these beds are strict aquicludes.
- Q. And so what you are saying is that the water if it gets in these Dockum group beds won't transmit itself subsurface?
- A The shale beds are full of original water depositions, what is residual after compaction and fresh water will not or any other water will not move through it in any quantity, not even enough to sustain a seep.

With one exception. Now, there is one exception.

There are a few little lenses in this group of slightly

10

21

22

23

24

25

cleaner sandstone confined within the group, within the

Dockum group and some of these fine grained, slightly cleaner

sandstones carry a little water but they are not very extensive

- Q Well, let me ask you this question, Mr. Kinney. This Walters water well is actually a fresh water well, is it not, in Section 26?
 - A Yes, sir.
- Nould you explain from what zone it is producing and
 how the water got there?

A. The Walters camp water well of the Snider Ranch is two hundred and thirty feet deep with the casing set at two hundred and twenty feet and according to testimony of the agent for the Snider Ranch in Case Number 4710 the water level stood at a hundred and ninety feet. If the water level stands at a hundred and ninety feet and no water was encountered until they got down to two hundred and twenty feet and there is no showing that they had any before that point, then we have confined water, not water table water but confined water and it has to be in a lense surrounded by a confining bed which is the Dockum group. The lense has to be recharged somewhere up dip to provide a pressure to raise the water above the limits of the aguifer itself.

- Q And so you are saying that this well is charged or recharged from water to the northwest?
 - A. Probably to the northwest, possibly to the north

11

14

15

16

17

18

19

20

22

25

itself but most likely to the northwest, most likely in the
area of Walters Lake or further on to the northwest where the
dip would bring this particular sand lense closer to the
surface and where the Dockum group would be thin enough, the
shales over the area would be thin enough to permit the
ingress of water.

- Q. And as I understand your justification for concluding that it's a confined water is that the water is actually in the well at a higher level than it was encountered in drilling?
 - A. That's right.
- Q Now, one other thing so that as you go from the surface down in this area you have, correct me if I'm wrong, the blow sand first and then the Dockum group?
 - A Yes, sir.
 - Q And then you go into the Rustler?
 - A. Yes, sir.
 - Q. Does the Rustler have fresh water?
- A. No, sir, the Rustler carries considerable water in two zones. The basal zone of the Rustler carries the water, in many places quite an abundant amount of water, heavily saturated in sodium chloride, plain salt. The middle member of the Rustler formation carries water in a lot of the areas, in the area of the mines, and it is saturated with a calcium sulphate or gypsum water. Meither one are fresh waters or potable waters.

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Santz Fe, New Mexico 87501 Phone (505) 982-9212

2

3

6

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

	Q		S	ο,	as	: I 1	ınde	ans	star	nd '	your	testim	ony,	Mr.	•	Kinney,	it
is	tha	t.	in	thi	s	area	t ti	he	on]	lу	fresh	wa te r	tha	t ha	18	been	
fou	ınd	is	i.n	a	CC	nfir	eđ	aı	rea	in	the	Dockum	gro	ap?			

- A. Correct. There are a few waters there that will meet the fresh water test.
- Q But as a rule the Dockum group because of the nature of its rocks will not transmit water horizontally.
- A. The group as a whole will not transport any water, only the few limited lenses.
- Q And below that is the Rustler which has no fresh water?
 - A. No fresh water.
- Okay. Now, Mr. Kinney, to the south are Southwest

 Potash or Amax's refinery, has there been any subsidence

 evidenced on the surface by virture of that mining operation?
- A Yes, sir, there has been subsidence over the mining areas where they have pulled the pillars and allowed the ground to settle.
 - Now, that's to the south of these subject leases?
 - A. South of the subject leases, near the Amax mine.
- 0. Okay, describe those cracks or fractures, if you would, please?
- A. In general in the subsidence areas there is no cracking, the hig broad area settles just slowly and makes a concave area at the top. However, on a few edges where the

sid morrish reporting service General Court Reporting Service 325 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

13

14

15

16

17

18

19

20

21

22

23

subsidence ends or commences, whichever word you care to use, you do get a fracture that comes to the surface and at the surface is the only place we see any openness inasmuch as the shales with their high colloidal content are a type of formation that heals instantly and does not have any material in it to sustain open spaces in the formation along the fracture, except at the very top, a few feet from the surface down where the overburden has been insufficient to cause it to immediately heal. It will heal in time but it is a very limited amount of open fracture.

- O So you are saying that when this subsidence occurs that outside of at the very surface, it immediately heals?
 - A Yes.
 - Q By that, it cements?
- A. It seals itself, it just never opens up, the formation just stays tight together along the fracture.
- Q Okay. Is there any possibility in your opinion of water from these pits getting in those cracks and going towards the northeast towards this Walters Lake well?
- A In my opinion there is no possibility of water moving down these fracture zones, either towards the Walters well or any other place along those fracture zones.
 - Q Because they have healed?
- A. Because it is right in the same type of formation and the fact of the fracture is not enough to change the nature

Page	24		
raue			

sid morrish reporting service General Court Reporting Service 25 Calle Mejia, No. 122, Santa Fe, New Mexico 87501 Phone (505) 982-9212

14

16

17

18

19

20

21

22

25

of the rock or to provide open spaces for water to percolate.

- Now, that subsidence has been caused when the Southwest Potash moves out of an area they have mined?
- A Moved out of an area and allowed the land to settle, yes, sir.
- Q Has Southwest Potash had any problems with water in the mined out area?
- A. No, the Southwest Potash, or Amax, has allowed their area to subside and then reentered the subsided area and is mining a bed over the original bed and are not troubled with water, they are in there mining and they are drawing their ore underneath the Rustler which carries many times more water than the Dockum group would ever.
- And so what you're saying is that after subsidence has occurred they go back in and mine above it?
 - A That's right.
- And yet they are below the Rustler, this sand that is full of high chloride non-potable water?
 - A. Yes, sir.
 - And they still haven't had any problem?
 - A. They haven't had any problems.
- Now, you earlier mentioned their forty to eighty acre pit, tailing pit or brine pit, have they had any evidence of migration of salt from that pit?
 - A. They have had no evidence that they know of to date

2

6

12

13

14

15

16

17

18

20

21

23

24

25

of any migration to water wells surrounding those pits.

- Q Now, you wisited with the --
- A I visited with the Chief Engineer, the Chief Mining Engineer of Amax Potash in regard to their mining operations and their problems, if any.
- Okay. Mr. Kinney, in your opinion will produced water in the seven pits shown on your exhibits and the subject of this application, will that produced water percolate -- well, first let me ask you, will it run along the surface towards the water well in Section 26 or towards the northwest or northeast towards those water wells?
 - M. No, sir.
 - Q. Okay, what about it percolating subsurface, will it?
- A. No, sir, it will not percolate to the northeast, it will settle into the dune sand and then be discharged again by evaporation and transpiration to the surface.
- Q. And in your opinion there is no probability that that water from, the produced water from these pits would enter the aquifer or the confined area that is charging this Walters well?
- A. No. The recharge has to be done north or northwest from that position.
- Q. Were Exhibits One through Four prepared by you or under your direction?
 - à. Yes, sir.

Q.	Including	the	pictures	which	vou	took?
Y.	THE WAY THE	C116	1/10 Curco	W117 C11	you	COOK

A. Yes, sir.

MR. LOSEE: We move to introduce Exhibits One through

4 Four.

22 j

MR. RAMEY: They will be admitted.

(THEREUPON, Applicants' Exhibits One
through Four were admitted into evidence.)

MR. LOSEE: That's all of the direct, Mr. Ramey.

MR. RAMEY: Any questions of the witness? Mr. Stamets

CROSS EXAMINATION

BY MR. STAMETS:

What volumes of water are being produced by those
 wells at the present time?

A. I cannot answer that exactly, I did not make any measurements myself. I note that the oil wells are discharging volumes of a barrel or two a day, up to volumes perhaps in the fifty to sixty barrel range. I asked that the operators file proper reports with the Commission.

MR. STAMETS: Mr. Losee, you I believe, asked that the record in the Examiner's Hearing be included in this case and I believe there is testimony in there concerning water volumes, concerning the waterflood which lies to the south of these wells and the potential for an increase in the volume of water produced by these wells resulting by such waterflood

h reporting service our Reporting Service 122, Santa Fe, New Mexico 87501 ie (505) 982-9212 activity.

2

5

6

8

10

11

12

13

16

17

18

19

21

MR. LOSEE: The answer is, yes, Mr. Stamets. I don't think the waterflood is to the south there, it's right in between. The waterflood is in between the two leases.

- A. In between the Marbob and the Heyco.

 MR. STAMETS: In the general vicinity anyhow?

 MR. LOSEE: Yes.
- (Mr. Stamets continuing.) I did observe from the pictures here, the Heyco pit six sixty from the north line and thirteen hundred feet from the east line of Section 32, 18, 30, and it would appear from this picture that the pit is about to run over?
- A. That was the way it appeared at the time, however, right to the south, it's a little bit hard to see in a two dimensional picture, if it did run over it couldn't go but a few feet because that swale is cut off by a ridge that comes in from the right-hand side. However, the water seems to be disappearing into the blow sand.
- Q Even if the pit did run over the dike we see here it still couldn't drain any significant distance?
 - A. No.
- Your testimony relative to the Walters camp well is that the source of that water lies some distance north or northwest of Section 26 and that the natural drainage, both surface and subsurface, would be such that there would be no

9

10

11

12

14

15

17

19

20

21

23

24

25

way	that	this	dispesed	water	could	enter	the	formations	and
get	to th	his w	e11?						

- A. Yes, sir.
- Q Mr. Kinney, are you aware of the general exception to Order R-3221 that exists in the area of these potash mines?
- A Well, I'm aware that they are allowed to dispose of their brine waters on the surface. I'm not familiar with the exact wording.
- Q You are not familiar with the geographical extent of that exception?
 - A. No.
- Q I believe the Commission's records probably will reflect that that lies just immediately to the south of these
 - A. I think that's right.
- Q If that line had been drawn a couple of miles to the north you probably wouldn't even be in here today?
- A. If it had been drawn as far as that Duval's north pit I wouldn't have been here certainly.

MR. STAMETS: That's all of the questions I have.

CROSS EXAMINATION

22 BY MR. RAMEY:

0 Mr. Minney, you mentioned something about water
wells around the Arax pit?

A. Yes.

Q There are some fresh water wells?

A. No, they are not fresh water wells, they are water wells that they get out of the area to use, they are primarily Rustler water wells that they are using to sluice their tailings with.

MR. RAMEY: Okay. One thing I would point out,
Mr. Losee, it seems like there are a lot of pits in these
pictures that don't have fencing around them or adequate
fencing. It is something that probably should be done and
there is one pit in particular that had very steep sides, if
livestock or wildlife got in there, I'm sure that ---

MR. LOSEE: Mr. Ramey, I'll be sure and advise my clients with respect to fencing pits.

MR. RAMEY: I will advise my district office also.

- Q (Mr. Ramey continuing.) But as far as you have been able to determine, Mr. Kinney, there is no fresh water in the area of these leases with the exception of what has been marked on Exhibit Four?
 - A That's right.
 - Q And you have no record of any to the south?
 - A No, sir.
 - Where the drainage is from these pits?
- A. No, sir. I went through the cable tool records and found no evidence.
 - Q Were most of these wells drilled with cable tools?

SIG MOITISM reporting service

General Court Reporting Service
Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

A. About half and half I would say.

βut some of these on the applicants' leases were
drilled with cable tools?

A. Oh, yes, and around them.

MR. RAMEY: Any other questions? Mr. Arnold?

CROSS EXAMINATION

BY MR. ARNOLD:

3

5

8

9

11

12

13

14

16

17

18

19

20

Q Mr. Kinney, Exhibit Three shows the direction of groundwater flow over the area, I wonder if you knew the procedure whereby they determined this?

- A. The procedure?
- Q Yes, how they determined this.
- A. The procedure is determined by the elevation at which water is in the various wells or areas. Water always flows at right angles down the steepest portion of the contour, so you draw your contours or take your elevations of water where it is found.
 - They contoured the water sand first?
- A. Well, they would have to contour not only -- all this map shows is the elevation of water in everyone of these wells. For instance, up there in 17 South, 29 East, it's at thirty-four seventy. Down in 18, 29, its at thirty two seventy and over in 18, 28 it's thirty-four twenty-five and from that they have worked out -- somebody had to draw some

sid morrish reporting serviceGeneral Court Reporting Service

825 Calle Mejia, No. 122, Santa Fe, New Mexico 87501
Phone (505) 982-9212

contours and determined the general direction of the contours and water always flows down the steepest dip.

Then on the surface, on the surface part, they had to use geography as shown on the topographic maps.

MR. ARNOLD: Thank you.

MR. RAMEY: Are there any other questions? The witness may be excused.

(THEREUPON, the witness was excused.)

MR. RAMEY: Do you have anything further, Mr. Losee?

MR. LOSEE: No, Mr. Ramey.

MR. RAMEY: Okay, the Commission will take the cases under advisement and the hearing is adjourned.

(THEREUPON, the hearing was adjourned.)

REPORTER'S CERTIFICATE

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

Sidney F. Morrish, C.S.R.

sid morrish reporting service General Court Reporting Service 825 Calle Mejia, No. 122, Sante Fe, New Mexico 87501 Phone (505) 982-9212



DIRECTOR
JOE D. RAMEY

OIL CONSERVATION COMMISSION

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

LAND COMMISSIONER
PHIL R. LUCERO

STATE GEOLOGIST
EMERY C. ARNOLD

January 26, 1977

Re: Mr. A. J. Losee Losee & Carson Attorneys at Law P. O. Crawer 239 Artesia, New Mexico 88210	CASE NO. 5720 ORDER NO. R-5246-A
	Applicant:
	Harvey E. Yates
Dear Sir:	
Enclosed herewith are two co Commission order recently en	pies of the above-referenced tered in the subject case.
Yours very truly, JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent to:	
Hobbs OCC x Artesia OCC x Aztec OCC	· 1

REFORE 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. 5720 DE NOVO Order No. R-5246-A

APPLICATION OF HARVEY E. YATES FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

1

This cause came on for hearing at 9 a.m. on January 17, 1977, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this 25th day of January, 1977, the Commission, a quotum being present, having considered the testimony presented and the exhibits received at said hearing, 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, Harvey E. Yates, is the owner and operator of the State Wells Nos. 1, 2, 3, 4, and 6, located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, NAPM, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
- (3) That Order (3) of Commission Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.
- (4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water

-2-Case No. 5720 <u>De Novo</u> Order No. R-5246-A

supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

- (5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) permission to dispose of salt water produced by applicant's above-described wells into an unlined surface pit located in Unit B of said Section 32.
- (7) That said State Wells Nos. 1, 2, 3, 4, and 6 produce approximately 18 barrels of water per day.
- (8) That there is fresh water in the vicinity of the above-described unlined pit for which a present or reasonably foreseeable beneficial use is or will be made.
- (9) That this matter came on for hearing before Examiner Richard L. Stamets on July 21, 1976, and pursuant to this hearing, Order No. R-5246 was issued in Case No. 5720 on August 24, 1976, which order denied the application of Harvey E. Yates for an exception to Order (3) of Commission Order No. R-3221.
- (10) That such denial was predicated on said existence of fresh water in the vicinity of said pit, the lack of evidence as to the direction of subsurface drainage or percolation of water from the proposed unlined pit, and the potential threat to said fresh water posed by such drainage or percolation.
- (11) That on September 13, 1976, the applicant, Harvey E. Yates, filed application for hearing De Novo of Case No. 5720 and the matter was set for hearing before a quorum of the Commission.
- (12) That this matter came on for hearing De Novo on January 17, 1977.
- (13) That the evidence presented demonstrates that surface drainage from the area of the proposed unlined pit would not be toward nor affect fresh water.
- (14) That the evidence presented demonstrates that subsurface drainage from the area of the proposed unlined pit would not be toward nor affect fresh water.

-3-Case No. 5720 De Novo Order No. R-5246-A

- (15) That there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably fore-seeable beneficial use is or will be made that would be impaired by contamination from the subject pit.
- (16) That the applicant should be permitted to dispose of water produced by wells on the above-described lease in an unlined surface pit located on said lease.

IT IS THEREFORE ORDERED:

- (1) That the applicant, Harvey E. Yates, is hereby granted an exception to Order (3) of Commission Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, from his State Well's Nos. 1, 2, 3, 4, and 6, located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, NMPM, North Benson Queen-Grayburg Pool, Eddy County, New Mexico, in an unlined surface pit located in Unit B of said Section 32.
- (2) That the Secretary-Director of the Commission may by administrative order rescind such authority whenever it reasonably appears to the Secretary-Director that such rescission would serve to protect fresh water supplies from contamination.
- (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

PHIL R. LUCERO, Chairman

ENERY CARNOLL, Member

JOE D. RAMEN, Member & Secretary

SEAL

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. 5720 Order No. R-5246

APPLICATION OF HARVEY E. YATES FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on July 21, 1976, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this $\frac{24\text{th}}{}$ day of August, 1976, 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, Harvey E. Yates, is the owner and operator of the State Wells Nos. 1, 2, 3, 4, and 6, located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, NMPM, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
- (3) That Order (3) of Commission Order No. R-3221, as amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or accopp, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.
- (4) That the aforeshid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in confunction with the production of oil or gas, or both, in unlined surface pits.

-2-Case No. 5720 Order No. R-5246

- (5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except blot said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water produced by applicant's above-described wells into an unlined surface pit located in Unit B of said Section 32.
- (7) That said State Well Nos. 1, 2, 3, 4, and 6 produce approximately 18 barrels of water per day.
- (8) That there is fresh water in the vicinity of the above-described unlined pit for which a present or reasonably foreseeable beneficial use is or will be made.
- (9) That the evidence presented at the hearing demonstrates that surface drainage from the area of the proposed pit is away from the area wherein said fresh water is located.
- (10) That no evidence was presented to demonstrate that subsurface drainage or percolation of water from the proposed unlined pit would not be toward nor affect said fresh water.
- (11) That to protect said fresh water from the potential harmful affects of the surface disposal of produced salt water in said pit the subject application should be denied.

IT IS THEREFORE ORDERED:

- (1) That the application of Harvey E. Yates for an exception to Order (3) of Commission Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, by his State Wells Nos. 1, 2, 3, 4, and 6 in Units G, B, A, J, and H, respectively, in Section 32, Township 18 South, Range 30 East, MMPM, North Benson Oueen-Grayburg Pool, Eddy County, New Mexico, in an unlined surface pit located in the vicinity of said wells is hereby denied.
- (2) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

-3-Case No. 5720 Order No. R-5246

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

JOE D. RAMEY, Member & Secretary

SEAL

Dockets Nos. 5-77 and 6-77 are tentatively set for hearing on February 2 and February 16, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION EFARING - MONDAY - JANUARY 17, 1977

OIL CONSERVATION COMMISSION - 9 A.M. - ROOM 205, STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

The following cases are continued from the December 1, 1976, Commission Hearing.

CASE 5719: Application of La Rue and Muncy for an exception to Order No. R-3221, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order

No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Federal

Wells Nos. 9 and 10, located in Units G and F, respectively, of Section 33, Township 18 South, Range 30

East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of La Rue and Muncy, this case will be heard $\underline{\text{Pe}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5720:

Application of Harvey E. Yates for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his State Wells Nos. 1, 2, 3, 4, and 6 located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Harvey E. Yates, this case will be heard $\underline{\text{De}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5721: Application of H & S Oil Company for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Well No. 7, located in Unit C of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of H & S Oil Company, this case will be heard $\underline{\text{De}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5722: Application of Gene Snow for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his Elk Well No. 1, located in Unit L of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Gene Snow, this case will be heard $\underline{\text{De}}$ Novo pursuant to the previsions of Rule 1220.

CASE 5723: Application of Marbob Energy Corporation for an exception to Order No. R-3221, Eddy County, New Mexico.

Applicanc, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No.

R-3221, permission to dispose of, into earthen pits, produced salt water from its Elliott Well No. 1 located in Unit E of Section 28, and its Elliott Wells Nos. 2 and 3 located in Units H and G, respectively, of Section 29, all in Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Marbob Energy Corporation, this case will be heard <u>De Novo</u> pursuant to the provisions of Rule 1220.

Docket No. 4-77

DOCKET: EXAMINER HEARING - WEDNESDAY - JANUARY 19, 1977

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for February, 1977, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for February, 1977, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.

Dockets Nos. 34-76 and 1-77 are tentatively set for hearing on December 15, 1976 and January 5, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: CCMMISSION HEARING - WEDNESDAY - DECEMBER 1, 1976

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

CASE 5719: Application of La Rue and Muncy for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Federal Wells Nos. 9 and 10, located in Units G and F, respectively, of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

> Upon application of La Rue and Muncy, this case will be heard De Novo pursuant to the provisions of Rule 1220.

1

CASE 5720: Application of Harvey E. lates for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his State Wells Nos. 1, 2, 3, 4, and 6 located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Rarge 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Harvey E. Yates, this case will be heard $\underline{\underline{De}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5721: Application of H&S Oil Company for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Well No. 7, located in Unit C of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of H&S Oil Company, this case will be heard De Novo pursuant to the provisions

CASE 5722: Application of Gene Snow for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his Elk Well No. 1, located in Unit L of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Gene Snow, this case will be heard $\underline{\text{De}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5723: Application of Marbob Energy Corporation for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its Elliott Well No. 1 located in Unit E of Section 28, and its Elliott Wells Nos. 2 and 3 located in Units H and G, respectively, of Section 29, all in Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Marbob Energy Corporation, this case will be heard De Novo pursuant to the provisions of Rule 1220.

Talia of Associated Pool Pales

GENERAL FULED AND REPULACIONS FOR THE ASSOCIATED POOLS OF SOUTHEASTERN AND

(See Special 1001 Files in each pool for orders applicable to those pools only. Special Pool Rules will be found in the same classification order as in the General Section, and, unless the special rules conflict with the general rule, the general rule is also applicable.)

A. WELL LICATION AND ACREAGE REQUIREMENTS

FULF 1: My well drilled to the producing formation of an associated pool regulated by this order and within said pool or within one mile outside the boundary of that pool, and not meaner to nor within the boundaries of another designated pool producing the same formation, shall be spaced, drilled, operated, and provated in accordance with the regulations in effect in that pool.

RULF 2: After the effective date of this order each well drilled or resorbleted on a standard proration unit within an associated pool regulated by this order shall be located as provided below:

OIL WELLS + SOUTHEAST MEN MERCICO

Standard	Proration Unit	

Location-Requirements

40 Acres

Not closer than 330 feet to the boundary of the tract

30 and 160 acres

Must be located within 150 feet of the center of the quarter-quarter section wherein located

GAS WELLS - SOUTHEAST NEW MEXICO

Standard Proration Unit

Location Requirements

160 acres

Must be located within 150 feet of the center of the quarter-quarter section wherein located.

320 acres

Not closer than 660 feet to the nearest side boundary nor closer than 1930 feet to the nearest end boundary of the spacing unit.

ALL WELLS - MORTHWEST NEW MEXICO

Standard Proration Unit

Location Requirements

40 Acres

Not closer than 330 feet to the boundary

80, 160 and 320 acres

Not closer than 790 feet to any quarter section line nor closer than 330 feet to any quarter-quarter section line.

- RULE 3: (a) Each gas well shall be located on a standard unit containing 160 acres or 320 acres, more or less, as provided in the special pool rules therefor.
- (b) Each oil well shall be located on a standard unit containing 40 acres, 50 acres or 160 acres, more or less, as provided in the special pool rules therefor.
- BULE 4: (a) The District Supervisor of the appropriate district offise of the Commission shall have the authority to approve a nor standard unit as an exception to Rule 3(a) or 3(b) without notice and hearing when the unorthoick size or shape of the unit is necessitated by a variation in the legal subdivision of the U.S. Public Land Surveys and the non-standard unit is not less than

75% nor more than 125% of a standard wit.

The District Supervisor of the appropriate district office of the Commission may approve the non-standard unit by:

- (1) Accepting a plat showing the projosed non-standard unit and the acreage to be dedicated to the non-standard unit, and
 - (2) Assigning an ellowable to the non-standard unit.
- (b) The Secretary-Director of the Commission may grant an exception to the requirements of Rule 3(a) or Rule 3(b), when the unorthodox size or shape of the unit is necessitated by a variation in the legal subdivision of the U.S. Public land Surveys and the non-standard unit is less than 75% or more than 105% of a standard unit, or where the following facts exist and the following provisions are compiled with: are complied with:
- The non-standard unit consists of quarter-quarter sections or lots that are contiguous by a common bordering side.
- (2) The non-standard unit lies wholly within a governmental subdivision or subdivisions which would be a standard unit for the well (half quarter section, quarter section, or half section) but contains less acreage than a standard unit.
- (3) The applicant presents written consent in the form of waivers from all offset operators and from all operators exming interests in the half querter section, quarter section or half section for 80-acre, 160-acre, and 80-acre standard dedications respectively, in which the non-standard unit is situated and which acreage is not included in said non-standard unit.
- (4) In lieu of paragraph (c) of this rule, the applicant may furnish proof of the fact that all of the foresaid operators mere notified by registered or certified mail of his intent to form such mon-standard unit. The Secretary-Director may approve the application if no such operator has entered an objection to the formation of such non-standard unit within 30 days after the Secretary-Director has received the application.

B. WELL CLASSIFICATION AND GAS-OIL RATIO LEMITATION

RULE 5: A well shall be classified as a gas well if it has a gas-liquid ratio of 30,000 or more cubic feet of gas per barrel of liquid hydrocarbons. A well shall be classified as an oil well if it has a gas-liquid ratio of less than 30,000 cubic feet of gas per barrel of liquid hydrocarbons. The simultaneous dedication of any acreage to an oil well and a gas well is prohibited.

 $\underline{\text{RULE 6}};$ That the limiting gas-oil ratio shall be 2,000 cubic feet of gas for each barrel of oil produced.

RULE 7: An oil well shall be permitted to produce only that amount of gas determined by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool. In the event there is more than one oil well on an oil proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any

A gas well shall be permitted to produce that amount of gas obtained by multiplying the top unit oil allowable for the pool by the limiting gas-liquid ratio for the pool and by a fraction, the numerator of which is the number of acres dedicated to the particular gas well and the denominator of which is a number equal to the number of acres in a standard cil proration unit in such pool. In the event there is more than one gas well on a gas proration unit, the operator may produce the amount of gas assigned to the unit from the wells on the unit in any proportion. preportion.

C. WELL TESTING

RMLE 3: The operator of each newly completed well shall cause a gas-fiquid ratio test to be taken on the well upon recovery of all load oil from the well, provided however, that in no event shall the test be commenced later than 30 days from the date of first production unless the well is connected to a gas-gathering facility and is producing under

a topporary gas allowable performed in accordance with Rule 11. Any woll which is obstrain that he excepted from the gualiquid ratio test replirement so long as it recaims obstrain. The initial gas-liquid ratio test shall be taken in the number preceribed by Rule 9. If the gas-liquid ratio is 30,000 cubic feet of gas per barrel of liquid hydrosphons, or some, the operator shall not produce the well until beneficial use can be more of the gas.

Sills 9: Coni-annual gas-liquid to the tests chall be taken on all wells distinct each year in sometimes with a test sensible prepared by the district office of the Completion. The initial gas-liquid ratio test shall befire as the first be i-annual test. Tests shall be 22-hour tests, being the final 14 hours of a Va-hour period during which the well shall be provided at a creating normal rate of production. Results of such tests shall be filed on Consistion form C-116 on or before the 10th may of the following runth. At least 72 hours prior to commencement of may such describe of the Consistion a test schedule for its wells specifying the time each of its wells is to be tested. Copies of the test schedule shall also be furnished to all offset operators. The supervisor of the appropriate district office of the Commission may grant an exception to the above test requirements where it is deconstrated that the well produces no liquids.

Special tests shall also be taken at the request of the Secretary-Director and may also be taken at the option of the operator. Such operial tests shall be taken in accordance with the procedures outlined hereinabove, including modification to the Commission and officet operators.

 $\underline{P^*177}$ 10: An initial shut-in pressure test shall be taken on each gas well but shall be reported to the Commission on Form C-125.

AUSPROAUT OF ALLOWANCE

ASSISTENCE ALLOWANTE
BUT 11: Any well completed after the effective date of these rules
onall receive an allowable only upon receipt by the appropriate
Complete district office of demission forms C-102, C-102, C-116,
and, in the case of a gas well, a transporter's notice of gas connection,
properly executed. The District Expervisor of the Commission's district
office is hereby authorized to assign a temporary gas allowable to wells
commented to a gas transportation famility during the recovery of load
oil, which allowable shall not excuei the number of cubic feet of gas
obtained by multiplying the saily top unit allowable for the pool by
the limiting gas-liquid ratio for the pool.

FULE 12: The associated ras promation period shall be the promation month which shall begin at 7 a.m. on the first day of the month and shall end at 7 a.m. on the first day of the next succeeding month.

RVIE 13: No associated gas underproduction may be carried forward into any promation month. (See AUCHEMATIVE PROPOSED RVIE 13 following Rule 21)

PULE 14: Any associate gas well which has an overproduced status at the end of any associate gas promitten period shall carry such overproduction into subsequent periods. If at any time a well is overproduced an amount equalling three times its current monthly allowable, it shall be shut in during that nonth and each succeeding month until the well is overproduced less than three times its current monthly allowable.

PMIF 15: The allowable assigned to a well during any one month of an associated gas promation period in excess of the production for the same month shall be applied against the overproduction carried into such period in determining the amount of overproduction, if any, which has not been compensated for.

RULE 16: The Commission may allow overproduction to be compensated for at a lesser rate than would be the case if the well were completely shut in upon a showing after notice and hearing that complete shut in of the well would result in material damage to the well or reservoir.

F. REPORTING OF PRODUCTION

RMEN 17: The monthly gas projection from each gas well shall be netered repartitely and the gas projection thereform shall be reported to the Commission on Form 0-11% so as to reach the Commission on or before the 24th day of the month next succeeding the month in which the gas was produced. The operator shall show on such report what disposition has been made of the produced gas.

RELF 18: Bath purchaser or taker of gas shall submit a report to the Confission so as to reach the Commission on or before the 15th say of the month next succeeding the month in which the gas was purchased or taken. Such report shall be filed on Form C-111 with the wells being listed in the same order as they are listed on the appropriate promation

G. GREENAL PROVISIONS

2013-19: Failure to comply with any provision of these rules shall result in the immediate cancellation of allowable assigned to the affected well. No further allowable shall be assigned until all rules and regulations have been complied with. The Secretary-Director shall notify the operator of the well and purchaser in writing of the date of allowable cancellation and the reason therefor.

RULE CO: All transporters or users of gas shall file gas well connection notices with the Commission as soon as possible after the date of connection.

Allowables to wells whose classification has charged from oil to gas or from gas to oil as the result of a gas-liquid ratio test shall commence on the first day of the month following the month in which such test was reported, provided that a plat (Form C-102) showing the acreage dedicated to the well and the location of all wells on the dedicated acreage has been filed.

Alternative Proposed Rule 13

- RULE 13: (a) Any associated gas well which has an underproduced status at the end of any associated gas proration period, shall carry such underproduction into subsequent periods.
- (b) Underproduction in excess of three times the current monthly allowable shall not be carried forward. For purposes of this hole, the monthly allowable shall be the full monthly allowable which would be assigned an associated gas well with the same acreage delication in the same pool.
- (c) Overproduction during any month shall be applied to a well's cumulative underproduction, if any, calculated in accordance with paragraphs (a) and (b) above.

Please note, alternatives of 1, 2, and 3 times the current monthly allowable will be considered with Alternative Proposed Rule 13(b). Comments by interested operators or transporters are solicited.

It will be proposed to reclassify the Jennings-Delaware and the North Paduca-Delaware Pools from associated pools to oil pools.

It will further be proposed to reclassify the Northwest Todd-San Andres Pool from an associated pool to an oil pool; however, special pool rules providing for 80-acre oil well spacing will be retained.

Dockets Nos. 29-76 and 30-76 are tentatively set for hearing on October 27 and November 10, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: COMMISSION HEARING - WEDNESDAY - OCTOBER 20, 1976

9 A.M. OIL CONSERVATION COLMISSION CONFERENCE ROOM,

STATE LAND OFFICE BUILDING, SANTA FE, NEW MEXICO

CASE 5719: Application of La Rue and Muncy for an exception to Order No. R-3221, Eddy County, New Maxico.

Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Federal Wells Nos. 9 and 10, located in Units G and F, respectively, of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of La Rue and Muncy, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 5720:

Application of Harvey E. Yates for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his State Wells Nos. 1, 2, 3, 4, and 6 located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Harvey E. Yates, this case will be heard De Novo pursuant to the provisions of Rule 1220.

CASE 5721: Application of H&S Oil Company for an exception to Order No. R-3221, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Well No. 7, located in Unit C of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of H&S Oil Company, this case will be heard $\underline{\underline{De}}$ Novo pursuant to the provisions of Rule 1220.

CASE 5722: Application of Gene Snow for an exception to Order No. R-3221, Eddy County, New Mexico.

Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his Elk Well No. 1, located in Unit L of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Gene Snow, this case will be heard \underline{De} Novo pursuant to the provisions of Rule 1220.

Application of Marbob Energy Corporation for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its Elliott Well No. 1 located in Unit E of Section 28, and its Elliott Wells Nos. 2 and 3 located in Units H and G, respectively, of Section 29, all in Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

Upon application of Marbob Energy Corporation, this case will be heard $\underline{\text{De Novo}}$ pursuant to the provisions of Rule 1220.

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF HARVEY E. YATES COMPANY FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

CASE NO. 5720

APPLICATION FOR REHEARING

Applicant, by its attorneys, and in support hereof respectfully states:

- 1. That on August 24, 1976, the Oil Conservation

 Commission of New Mexico ("Commission") entered its Order No.

 R-5246, to which reference is here made, denying the application for an exception to Order (3) of Commission Order No. R-3221, as amended.
 - 2. That Order No. R-5246 is erroneous, as follows:
- (a) Contrary to Finding (8), there is <u>no</u> fresh water in the vicinity of the unlined pit for which a present or reasonably foreseeable leneficial use is or will be made.
- (b) Contrary to Finding (10), there was evidence that subsurface drainage or percolation of water from the proposed unlined pit would not be toward nor affect fresh water, if any is present in the vicinity of the unlined pit.
- (c) Contrary to Finding (ll) and Order (l), applicant should have been permitted to dispose of salt water produced from its wells in an unlined surface pit located in the vicinity of said wells.

WHEREFORE, applicant prays:

- A. That the Commission grant a rehearing and that notice of said rehearing be given as required by law;
- B. That upon rehearing the Commission enter an order granting applicant an exception to Commission Order No. R-3221, as amended, to permit applicant to dispose of water produced from its wells in an unlined surface pit located in the vicinity of said wells; and
- C. For such other and further relief as may be just in the premises.

HARVEY E. YATES COMPANY

By: A. I. Josee, for

LOSEE & CARSON, P.A. P. O. Drawer 239 Artesia, New Mexico 88210

Attorneys for Applicant

The state of the s

OIL CONSERVATION COMMISSION

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

87501

LAND COMMISSIONER
PHIL R. LUCERO



STATE GEOLOGIST EMERY C. ARNOLD

DIRECTOR
JOE D. RAMEY

Mr. A. J. Losee Losee & Carson Attorneys at Law Post Office Box 239	ORDER NO. R-5246 Applicant:
Artesia, New Mexico 88210	Harvey E. Yates
Dear Sir:	
	copies of the above-referenced entered in the subject case.
JOE D. RAMEY Director	
JDR/fd	
Copy of order also sent t	o:
Hobbs OCC x Artesia OCC x Aztec OCC	

Dockets Nos. 22-76 and 23-76 are tentatively set for hearing on August 4 and August 18, 1976. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - WEDNESDAY - JULY 21, 1976

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

The following cases will be heard before Richard L. Stamets, Examiner, or Paniel S. Nutter, Alternate Examiner:

- ALLOWABLE: (1) Consideration of the allowable production of gas for August, 1976, from seventeen prorated pools in Lea, Eddy. Chaves, and Roosevelt Counties, New Mexico.
 - (2) Consideration of the allowable production of gas for August, 1976, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
- Application of Marathon Oil Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Northeast Anderson Ranch Unit Area comprising 2,720 acres, more or less, of State lands in Township 15 South, Range 32 East, Lea County, New Mexico.
- CASE 5716: Application of Atlantic Richfield Company for compulsory pooling and an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Pennsylvanian formation underlying the W/2 of Section 33, Township 17 South, Range 28 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at an unorthodox location 1315 feet from the South and West lines of said Section 33. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 5717: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Petroleum Development Corporation, Commercial Union Assurance Companies, and all other interested parties to appear and show cause why the Vaughn State Well No. 1, located in Unit E of Section 16, Township 6 North, Range 17 East, Guadalupe County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.
- CASE 5718: In the matter of the hearing called by the Cil Conservation Commission on its own motion to permit Morad Oil & Mining Company, Western Surety Company, and all other interested parties to appear and show cause why the Campbell Well No. 1, located in Unit A of Section 25, Township 28 North, Range 35 East, Union County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.
- CASE 5719: Application of La Rue and Muncy for an exception to Order No. R-3221, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Federal Wells Nos. 9 and 10, located in Units G and F, respectively, of Section 33, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
- CASE 5720: Application of Harvey E. Yates for an exception to Order No. R-3221, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its State Wells Nos. 1, 2, 3, 4, and 6 located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
 - CASE 5721: Application of H & S Dil Company for an exception to Order No. R-3221, Eddy County, New Mexico.

 Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from its McClay Well No. 7, located in Unit C of Section 33, Township 18 South, Range 30 East, North Benson-Queen Grayburg Pool, Eddy County, New Mexico.

- CASE 5722: Application of Gene Snow for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, permission to dispose of, into earthen pits, produced salt water from his Elk Well No. 1, located in Unit L of Section 32, Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
- CASE 5723: Application of Marbob Energy Corporation for an exception to Order No. R-3221, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks, as an exception to the provisions of Commission Order No. R-3221, perminsion to dispose of, into earthen pits, produced salt water from its Elliott Well No. 1 located in Unit E of Section 28, and its Elliott Wells Nos. 2 and 3 located in Units H and G, respectively, of Section 29, all in Township 18 South, Range 30 East, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF HARVEY E. YATES COMPANY, GENE SNOW, MARBOB OIL COMPANY, SIMMS & REESE, AND LARUE & MUNCY, FOR AN EXCEPTION TO ORDER NO. R-3221 AS AMENDED, EDDY COUNTY, NEW MEXICO.

CASE NO.

APPLICATION

COME NOW HARVEY E. YATES COMPANY, GENE SNOW, MARBOB OIL COMPANY, SIMMS & REESE, and LARUE & MUNCY, by and through their attorneys, and in support hereof respectfully state:

- 1. That applicants are the owners and operators of the following leases located in Eddy County, New Mexico:
 - A. Harvey E. Yates Company -

Yates State Nos. 1, 2, 3, 4, and 6, located in the NE/4, N/2 SE/4, Section 32, Township 18 South, Range 30 East, N.M.P.M.

B. Gene Snow -

Elk No. 1, located in the NW/4 SW/4, Section 32, Township 18 South, Range 30 East, N.M.P.M.

C. Marbob Oil Company -

Elliott Nos. 1, 2, and 3, located in the SW/4 NW/4, Section 28, Township 18 South, Range 30 East, N.M.P.M., and the S/2 NE/4, Section 29, Township 18 South, Range 30 Rast, N.M.P.M.

D. Simus & Reese -

McClay No. 7, located in the NE/4 NW/4, Section 33, Township 18 South, Range 30 East, N.M.P.M.

F. LaRue & Muncy -

McClay No. 9, located in the SW/4 NE/4, Section 33, Township 18 South, Range 30 East, N.M.P.M., and

McClay No. 10, located in the SE/4 NW/4, Section 33, Township 18 South, Range 30 East, N.M.P.M.

- 2. Applicants seek an exception to the provisions of Oil Conservation Commission Order No. P-3221 as amended to permit the disposal of saltwater produced by the above mentioned wells in unlined surface pits of said lessees.
- 3. That there is no shallow fresh water in the vicinity of the above described weals for which a present or reasonably foreseeable beneficial use is or will be impaired by contamination from unlined surface pits located in the vicinity of said wells.
- 4. That the approval of this Application will prevent waste.

WHEREFORE, applicants pray:

- A. That this Application be set for hearing before an examiner and that notice of said hearing be given as required by law;
- R. That woon hearing the Commission enter its order granting applicants an exception to Dil Conservation Commission Order No. R-3221 as amended to permit utilization of amlined surface pits for the disposal of saltmater produced by the above described wells, and

C. For such other and further relief as may be just in the premises.

HARVEY E. YATES COMPANY, GENE SNOW, MARBOB OIL COMPANY, SIMMS & REESE, LARUE & MUNCY

By:

LOSEE & CARSON, P.A. P. O. Drawer 239 Artesia, New Mexico 88210

Attorneys for Applicants

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

đư/

1

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

SA

CASE NO5720
Ownorder No. R- 5246
APPLICATION OF HARVEY E. YATES
FOR AN EXCEPTION TO ORDER NO. R-3221,
AS AMENDED, EDDY COUNTY, NEW MEXICO.
ORDER OF THE COMMISSION
BY THE COMMISSION:
This cause came on for hearing at 9 a.m. onJuly 21
19 76, at Santa Fe, New Mexico, before Examiner Richard L. Stame
NOW, on this day of July , 1976, the
Commission, a quorum being present, having considered the testimon
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, Harvey E. Yates , is
the owner and operator of the State Wells Nos. 1, 2, 3, 4, and 6
G, B, A, J, and H, respectively, located in Units/ of Section 32, Township 18 South,
Range 30 East , NMPM, North Benson Queen-Grayburg Pool,
Eddy County, New Mexico.
(3) That Order (3) of Commission Order No. R-3221, as amended
prohibits in that area encompassed by Lea, Eddy, Chaves, and
Roosevelt Counties, New Mexico, the disposal, subject to minor
exceptions, of water produced in conjunction with the production
of oil or gas, or both, on the surface of the ground, or in any
pit, pond, lake, depression, draw, streambed, or arroyo, or in
any watercourse, or in any other place or in any manner which

would constitute a hazard to any fresh water supplies and said

disposal has not previously been prohibited.

Pr.

λ.

- (4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.
- (5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water produced by applicant's above-described wells into an unlined surface pit located in Unit B of said Section 37.
- (7) That applicant's soid State Well Nas. 1, 2, 3 4, and 6 produce approximately 18 barrels of water per day.
- (8) That there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pit.
- (9) That the nature of the reservoir of said North Benson

 Queen-Grayburg Pool is such that reinjection of produced water into said reservoir would result in greater ultimate recovery of oil and gas therefrom thereby preventing waste.
- (10) That to prevent the waste of oil and gas in said

 North Benson Queen-Grayburg

 Pool, permanent authority to

 dispose of produced water from applicant's State Wells Nos. 1, 2, 3

 4, and 6 in an unlined surface pit on said lease should not be granted.

- (8) That there is fresh water in the vicinity of the above-described unlined pits for which a present or reasonably foreseeable beneficial use is or will be made.
- (9) That the evidence presented at the hearing demonstrates that surface drainage from the area of the proposed pit (6) is away from the area wherein said fresh water is located.
- (10) That no evidence was presented to demonstrate that subsurface drainage or percolation of water from the proposed unlined pit (2) would not be toward nor affect said fresh water.
- (11) That to protect said fresh water from the potential harmful affects of the surface disposal of produced salt water in said pit the subject application should be denied.

IT IS THEREFORE ORDERED:

	(1) That the application of Harvey E. Yates for	
	an exception to Order (3) of Commission Order No. R-3221, as amended, to	
	dispose of water produced in conjunction with the production of oil or gas, o respect	r ivelv.
	both, by his State Wells Nos. 1, 2, 3, 4, and 6 in Units G, B, A, J, and H, /	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	kowated in Section 32 , Township 18 South , Range	_
30	East , NMPM, North Benson Queen-Grayburg Pool , Eddy	
	an County, New Mexico, in/unlined surface pits located in the vicinity of said	
	well is hereby denied.	

(2) 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.

DRAFT

dr/

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO



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

CASE NO. 5720 DE NOVO

Order No. R-5246-A

APPLICATION OF HARVEY E. YATES FOR AN EXCEPTION TO ORDER NO. R-3221, AS AMENDED, EDDY COUNTY, NEW MEXICO.

Du

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on January 17, 1977, at Santa Fe, New Mexico, before the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission."

NOW, on this ________, day of ________, 1977, the Commission, a quorum being present, having considered the testimony presented and the exhibits received at said hearing, 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, Harvey E. Yates, is the owner and operator of the State Wells Nos. 1, 2, 3, 4, and 6, located in Units G, B, A, J, and H, respectively, of Section 32, Township 18 South, Range 30 East, NMPM, North Benson Queen-Grayburg Pool, Eddy County, New Mexico.
- amended, prohibits in that area encompassed by Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico, the disposal, subject to minor exceptions, of water produced in conjunction with the production of oil or gas, or both, on the surface of the ground, or in any pit, pond, lake, depression, draw, streambed, or arroyo, or in any watercourse, or in any other place or in any manner which would constitute a hazard to any fresh water supplies and said disposal has not previously been promibited.

- (4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.
- (5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A.. 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.
- (6) That the applicant seeks as an exception to the provisions of the aforesaid Order (3) be permit the dispessed of salt water produced by applicant's above-described wells into an unlined surface pit located in Unit B of said Section 32.
- (7) That said State Wells Nos. 1, 2, 3, 4, and 6 produce approximately 18 barrels of water per day.
- (8) That there is fresh water in the vicinity of the above-described unlined pit for which a present or reasonably foreseeable beneficial use is or will be made
- (9) That this matter came on for hearing before Examiner Richard L. Stamets on July 21, 1976, and pursuant to this hearing, Order No. R-5246 was issued in Case No. 5720 on August 24, 1976, which order denied the application of Harvey E. Yates for said exception to Order (3) of Commission Order No. R-3221.

73-Case No. 5720 DE NOVO Order Mo. R-5246-A

- (10) That such denial was predicated on said existence of fresh water in the vicinity of said pit, the lack of evidence as to the direction of subsurface drainage or percolation of water from the proposed unlined pit, and the potential threat to said fresh water posed by such drainage or percolation.
- (11) That on September 13, 1976, the applicant, Harvey E. Yates, filed application for hearing <u>de novo</u> of Case No. 5720 and the matter was set for hearing before a quorum of the Commission.
- (12) That this matter came on for hearing $\underline{\text{De Novo}}$ on January 17, 1977.
- (13) That the evidence presented demonstrates that surface drainage from the area of the proposed unlined pit would not be toward nor affect fresh water.
- (14) That the evidence presented demonstrates that subsurface drainage from the area of the proposed unlined pit would not be toward nor affect fresh water.
- (15) That there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pit.
- (16) That the applicant should be permitted to dispose of water produced by wells on the above-described lease in an unlined surface pit located on said lease.

IT IS THEREFORE ORDERED:

quanted an exception to Order (3) of Commission Order No. 8-3221, as emended, to dispose of water produced in conjunction with the production of oil or gas, or both, from his State Wells Nos. 1, 2, 3, 4, and 6, located in Units G, B, A, J. and H, respectively, of Section 32, Township 19 South, Range 30 Hast, MMPM, North Benson Queen-Graykurg Pool, Eddy Cotally, New Mexico, in an unlined surface oit located on-said-lease.

-4- 5720 Case No. 5719 De Novo Order No. R-5246-A

- (2) That the Secretary-Director of the Commission may by administrative order rescind such authority whenever it reasonably appears to the Secretary-Director that such recission would serve to protect fresh water supplies from contamination.
- (3) That jurisdiction of this cause is remained 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.