

5860Application Transcripts. Small Exhibits E/C.

	2 3	Santa Fe Februa	NSERVATION COMMISSION , New Mexico ry 16, 1977
	4	EXAMIN	ER HEARING
	5	IN THE MATTER OF:	) ) ) )
	7	Application of Rice Eng Operating, Inc. for sal Lea County, New Mexico.	t water disposal,) 5860
<b>Bervice</b> we Mexico 87501	9 10	BEFORE: Richard L. Stamets,	Examiner
Hing 801 by Service 6, New Me -9212	11	TRANSCRI	PT OF HEARING
report Asport Santa F 505) 982	12 13	APPE	ARANCES
<b>morrish</b> General Council Mejia, No. 122 Phone (	14	For the New Mexico Oil Conservation Commission:	Lynn Teschendorf, Esq. Legal Counsel for the Commission State Land Office Building
<b>Sid</b>	15 16	For the Applicant:	Santa Fe, New Mexico Jason W. Kellahin, Esq.
æ.	17		KELLAHIN & FOX Attorneys at Law 500 Don Gaspar
	18		Santa Fe, New Mexico
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5. * *	1	MR. STAMETS: Then we will now proceed to Case 5860.
	2	MS. TESCHENDORF: Case 5860, application of Rice
•	3	Engineering & Operating, Incorporated for salt water disposal,
4 4 •	4	Lea County, New Mexico.
-	5	MR. KELLAHIN: If the Examiner please, Jason Kellahir
	6	Kellahin and Fox, Santa Fe, appearing for the applicant and we
	7	have one witness to be sworn.
	8	(THEREUPON, the witness was duly sworn.)
105%	9	
	10	L. R. GOODHEART
Now We	11	called as a witness, having been first duly sworn, was
<b>Ortfre</b> porting nta Fe.	12	examined and testified as follows:
<b>1</b> (583)	13	
Li, No.	14	DIRECT EXAMINATION
	15	BY MR. KELLAHIN:
825 C - +	16	Q. Would you state your name, please?
	17	A L. B. Goodheart.
	18	Q By whom are you employed and in what position,
	19	Mr. Goodheart?
	20	A. Rice Engineering & Operating, Inc., Hobbs,
1. 1. 1.	21	New Mexico.
<u>.</u>	22	Q What is your position?
	23	A. Division Manager.
	24	Q Have you ever appeared before the Oil Conservation
	25	Commission and made your qualifications a matter of record?

A. Yes, I have.

MR. KELLAHIN: Are the witness' qualifications acceptable?

MR. STAMETS: They are.

Q (Mr. Kellahin continuing.) Mr. Goodheart, are you
familiar with the application of Rice Engineering & Operating
7 in Case Number 5860?

A. Yes, sir.

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What is proposed by the applicant in this case? 9 Q 10 Rice Engineering & Operating as operator of the A. Hobbs Salt Water Disposal System, Lea County, New Mexico in 11 this case, applies for a permit for a salt water disposal well 12 13 located in the southeast quarter of the southeast quarter of 14 Section 16, Township 19 South, Range 38 East, Lea County, New Mexico. 15

This well will be used by the Hobbs Salt Water
Disposal System to be designated Hobbs SWD Well, Hobbs Salt
Water Disposal System Well No. P-16 with salt water to be
disposed into the San Andres formation.

20 Q Referring to what has been marked as Applicant's
21 Exhibit Number One, would you identify that exhibit, please?
22 A Exhibit Number One is the application to dispose of
23 salt water by injection into a porous formation.

24 Q And that shows that it is going to be injected into 25 the San Andres formation with a top of forty-two hundred and

sid morrish reporting service General Court Reporting Service Cille Main. No. 122. Santa Fe. Nor. Nerveo

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ten feet, is that correct?

A. The proposed interval for injection is from forty-one seventy-six to fifty-five hundred feet.

Q And this is a producing formation, is it not?

A. Yes.

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Q. There is production in the area?

A. There is not production adjoining, there is production in the Hobbs Pool from this interval.

Q. It is some distance from this well?A. Yes.

Q Now, referring to what has been marked as Exhibit Number Two, would you identify that exhibit?

A This is a plat showing the location of the well to be six sixty from the east line and six sixty from the south line of Section 16, 1. ship 19 South, Range 38 East, Lea County, New Mexico.

17 Q Now, referring to what has been marked as Exhibit
18 Number Three would you identify that exhibit?

A. This is a wellbore sketch of our proposed completion
of the well. It shows that the well was originally drilled
to a TD of ten thousand, zero, zero, eight feet by Nurberg
and Ingraham. We have proposed to clean out the cement plugs
from the surface down to the top of the cement plug at fiftyfive hundred feet. This injection will take place in the
open hole interval from forty-one seventy-six to fifty-five

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hundred feet. We propose to run four and a half inch plastic lined tubing set at approximately forty-one hundred and sixty feet with an oil blanket in the tubing casing annulus. Q. You don't propose to use a packer, is that correct? A. That is correct.

Q Have you successfully used the system you are
proposing with an oil blanket in the casing tubing annulus?
A. Yes, we have.

Q How will that operate to inform you of any leak in either the casing or in the tubing in the event of trouble?

A. You establish a static fluid level in the well, you calculate from that the gravity of oil that you will install in the annulus which will give you a positive pressure reading at the surface. A pressure gauge will be installed and monitored daily. Any marked drop in casing pressure such as a tubing or casing leak will be indicated on the gauge. Also we can monitor bottom-hole conditions from these pressure recordings that we observe at the surface.

Q. Can you monitor the bottom-hole conditions better
with this type of completion than with a packer in the hole?
A. Yes.

Q. Has the Commission approved this type of completion in other disposal wells?

A They have.

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Q Now, what is the casing on this well and the cementing

program?

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It has thirteen and three-eighths casing set at A. the hundred and ninety-two feet with three hundred sacks of cement. The cement has been circulated to the surface. The well already has eight and five-eights OD casing set at forty-one hundred and seventy-six feet with twenty-two hundred 6 sacks of cement. The cement was circulated to the surface. Now, in your opinion will the completion you are Q. proposing for this well as a salt water disposal well fully protect all fresh water zones in any producing horizons this 10 well may have penetrated? 11

It will. A.

Now, referring to what has been marked as Exhibit 13 Ô. Number Four would you identify that exhibit? 14

ĥ. Exhibit Number Four is a plat showing the wells 15 located within a radius of two miles of the proposed SWD 16 Well No. P-16. 17

Are those wells generally completed in the San Andres Q. 18 formation? 19

Yes, Grayburg, Grayburg-San indres intervals, yes. A. 20 Will the injection of water in the same formation 0. 21 in the disposal well cause any damage to the producing wells? 22 No. 23

What volume of water will be injected in this Q. 24 disposal well? 25

We propose to inject up to fifty five -- let me A, check this and see -- anticipated daily volumes, minimum would be three thousand, maximum seven thousand barrels per day.

What is the source of this water? 5 Q This is water produced in the Hobbs Pool ac various A. 7 tank battery locations which we gather by pipeline.

And your pipeline is already in place, is it? Q. A. Yes.

10 Did you attach to your application in this case an Q. 11 exhibit showing the productive formations all wells within 12 a two-mile radius?

13 A. Yes, we did.

14 MR. KELLAHIN: We would like the Examiner to take administrative notice of the tabulation of the wells in the 15 producing formations in the intervals within a two-mile radius 16 of the disposal well.

MR. STAMETS: Okay, this is just a tabulation of 18 the wells? 19

A. Yes, it shows the subsurface producing intervals of 2Û all the wells within a two-mile radius. 21

MR. STAMETS: We do have a copy of this in the file. 22 (Mr. Kellahin continuing.) Were Exhibits One through 23 Q. 24 Four prepared by you or under your supervision?

They were. A.

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	1	MR. KELLAHIN: At this time I offer into evidence
	2	Exhibits One through Four inclusive.
	3	MR. STAMETS: These exhibits will be admitted.
	4	(THEREUPON, Applicant's Exhibits One through
	5	Four were admitted into evidence.)
	6	MR. KELLAHIN: That's all we have on the direct
	7	examination, Mr. Stamets.
		THE WITNESS: Are you going to use the letter?
87501 87501	. 9	MR. KELLAHIN: If the Examiner please, we have
<b>HETVÍCE</b> Vice Mexico 8	10	attached Exhibit Number Five, a letter from Amoco.
New Me	11	MR. STAMETS: That's Exhibit Number Six.
<b>Ortin</b> purting ata Fe. 982-92	12	MR. KELLAHIN: Waiving their objection to the
h reg Journ Ru 122, Se re (505)	13	disposal well.
<b>unorris</b> Generul C Kejia, No. 1 Phor	14	MR. STAMETS: And Exhibit Number Five is the workover
<b>sid 1110</b> Ger Calle Mejia	15	procedure?
8:15 C	- 16-	MR. KELLAHIN: Yes.
	17	MR. STAMETS: And that's the one you intend to
	18	follow in this case?
	19	MR. KELLAHIN: That is correct.
	20	MR. STAMETS: And you wish to offer Five and Six?
	21	MR. KELLAHIN: Five and Six also.
	22	MR. STAMETS: We will accept Exhibits One through
	23	Six in this case.
	24	(THEREUPON, Applicant's Exhibits One through
	25	Six were admitted into evidence.)
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XN.

THE WITNESS: I might point out that Amoco is the only operator within this two-mile radius and this Exhibit Six is offered in evidence from them indicating that they have no objection to our proposed completion of this well as set out in our application.

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### CROSS EXAMINATION

BY MR. STAMETS:

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Q. Mr. Goodheart, I presume by this time you have heard of the Federal underground  $inj^{4}$  ion control program that may be coming up someday?

A I have heard of that, yes.

Q Are you aware that one of the provisions that has been in these regulations almost since the beginning and from which they have not deviated, a requirement that all injection would be through tubing under packer?

17 A. I'm not personally aware of this, I have been
18 informed of this by employees of the Oil Construction Commission,
19 but I'm not personally aware of the regulations.

Q I just call that to your attention at this time
 that perhaps it might be something you might wish to consider.
 It would certainly be cheaper to set a packer now than it
 would be in a couple of years.

Now, on these systems that you have used like this where you have tubing suspended in the hole, have you ever

Page 1 pulled any of that tubing? 2 A, Yes, sir. 3 And have you ever had any that has failed, any tubing a 4 that has had a hole in it? 5 Yes, we have. A. 6 In every instance did you know about it before you ۵ pulled the tubing? --7 8 A. We did. 9 Q Is that why you pulled the tubing? 10 That's why we pulled the tubing. A. 11 From the Exhibit Number One submitted in this case, Q that indicates that this is a gravity system? 12 13 Yes. A. 14 Q. Do you anticipate the need to apply any pressure? We do not, no. 15 A. 18 Okay. Would an order which limited injection to Q. gravity pressure be acceptable? 17 I think so but I would recommend that maybe you 18 A. would set reasonable pressure limitations in case things don't 19 turn out quite as we expect. We would leave that to your 20 judgement. 21 The other alternative has been our two-tenths of a Q. 22 pound per foot of depth. 23 24 A. This would certainly be acceptable. 25 Q. I note from Exhibit Number Four that there appear to

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	1	be three wells located within one half mile of the injection
<b>~</b>	2	well. Two of these have been plugged and one of them appears
	3	to be temporarily abandoned?
	4	A. Yes.
	5	Q. Do you have any evidence at the hearing today to show
<b>]</b> .	6	the well construction or the plugging programs for these wells?
.t	7	A. I do not.
1	8	Q. Would you submit that following this hearing to be a
87501	9	part of the record?
	-10	A. We will, yes.
2000 BC	11	Q. Okay, the reason for this, of course, is to assure
porti reportin anta Fe	12	the Commission that the water which is being injected in this
Min 19 Court He Court He Some (502	13	well would not escape either through the two plugged holes
Constraint Constraint	14	because they were not properly plugged across this zone or
Sid n Cale Me	15	through the well shown as a producing well because of improper
	16	casing or cementing.
	17	A. We would be glad to submit evidence as to the
1	18	condition of these wells so far as we can determine from
	19	Commission and company records.
	20	Q All right, and the Examiner, of course, will have
	21	to take that evidence into consideration when it is presented.
	22	MR. STAMETS: Are there any other questions of the
	23	witness?
	24	MR. KELLAHIN: No.
	25	MR. STAMETS: He may be excused.
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	2		MR. STAMETS: Is there			In Child		
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## REPORTER'S CERTIFICATE

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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.

Sidhey F/ Morrish, C

a do hereby certify that the foregoing is a complete resord of the proceedings in the Examiner hearing of Case No. 5866

Kew Mexico Oil Conservation Commission



DIRECTOR

JOE D. RAMEY

# **UIL CONSERVATION COMMISSION**

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87501 LAND COMMISSIONER PHIL R. LUCERO March 16, 1977



STATE GEOLOGIST EMERY C. ARNOLD

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Fe, New Mexico 87501

CASE NO.

ORDER NO.

Applicant:

Rice Engineering & Operating, Inc.

5860

R-5384

Dear Sir:

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

Re:

Yours very truly, JOE D. RAMEY Director

JDR/fd

Copy of order also sent to:

Hobbs OCC	X
Artesia OCC	X
Aztec OCC	

Other

### BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 5860 Order No. R-5384

APPLICATION OF RICE ENGINEERING & OPERATING, INC. FOR SALT WATER DISPOSAL, LEA COUNTY, NEW MEXICO.

#### ORDER OF THE COMMISSION

BY THE COMMISSION;

This cause came on for hearing at 9 a.m. on February 16, 1977, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this <u>15th</u> day of March, 1977, 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, Rice Engineering & Operating, Inc., is the curner and operator of the Hobbs SWD Well No. P-16, located in Unit P of Section 16, Township 19 South, Range 38 East, NMPM, Hobbs Field, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres formation, with injectica into the open-hole interval from approximately 4176 feet to 5500 feet.

(4) That the injection should be accomplished through 4 1/2inch plastic lined tubing under a floating oil blanket, and that pressure gauges should be attached to the tubing and to the annulus in order to determine leakage in the casing or tubing.

(5) That the injection well or system should be equipped with a pop-off value or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 835 psi.

(6) That the operator should notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected. -2-Case No. 5860 Order Nc. R-5384

(7) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(8) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

## IT IS THEREFORE ORDERED:

(1) That the applicant, Rice Engineering & Operating, Inc., is hereby authorized to utilize its Hobbs SWD Well No. P-16, located in Unit P of Section 16, Township 19 South, Range 38 East, NMPM, Hobbs Field, Lea County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 4 1/2-inch tubing with injection under an oil blanket into the open-hole interval from approximately 4176 feet to 5500 feet;

**PROVIDED** HOWEVER, that the tubing shall be plastic-lined, and that pressure gauges shall be attached to the tubing and to the casing-tubing annulus in order to determine leakage in the casing or tubing.

(2) That the injection well or system shall be equipped with a pop-off value or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 835 psi.

(3) That the operator shall notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

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

-3-Case No. 5860 Order No. R-5384

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

D.

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

No

mby E Secretary



PHIL R. LUCERO, Chairman

Cany Clumb EMERY C. RNOLD, Member

RAMEY

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jr/

RICE Engineering & Operating, Inc.

Post Office Box 1142

Telephone (505) 393-9174

# HOBBS. NEW MEXICO 88240 February 17, 1977

New Vexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico 87501 Attn: Mr. Richard L. Stamets

> Re: Case 5860 (Hobbs\_SWD Well P-16)

Gentlemen:

0 K R L 5 17 0 K 22 . 17

> As requested at Examiner Hearing of Wednesday, February 16, 1977, for our application for salt water disposal in Hobbs SWD Well No. P-16, enclosed are copies of Forms C-103 and C-105 for three (3) wells located within one-half mile radius of our proposed SWD Well No. P-16. These records indicate that the wells were properly plugged and should not allow water to migrate above the San Andres injection interval.

> We respectfully request approval of our application for salt water disposal into the San Andres formation through the open hole interval from 4176 feet to 5500 feat of our Hobbs SWD Well No. P-16.

> > Yours very truly,

RICE ENGINEERING & OPERATING, INC. L. B. Goodheart Division Manager

LBG/ac

Enclosures



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			EXH	IBIT "C"		
	DWN			AREA PLAT HOBBS SWD WELL NO. P-16	scale 1* = 4000	-
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2000 gals LST NEA, re-acidize with 5000 gals LST NEA. Frac with 5000 gals

to 4109!, 4117! to 4128!. Acidize with 500 gals IST NEA, re-acidize with

refined oil and 5000 lbs sand at 3.3 B.P.M.

Result of Production Stimulation On 24 hr FT Hall p upad 5 BO and no water ending 11:00 2.m.

GOR - TETM		Gravity - 30.7	Depth Cleaned Out 42401 PUTD 4135
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ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

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I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far

can be determined from available records.

W. B. Hubbard November 21, 1961

Addres P. Q. Box 728 - Hobos, New Mexico

۰.

Company or Operator TEXACO Inc.

Position or Title\_District Superintenient

	Pro-	11/1/10
		(Revised 3-55)
NEW MEXICO OIL CONS		SION The second se
_	REPORTS ON WELLS	· 0.1
(Submit to appropriate District Off	ice as per Commissio	on Rule 1106)
COMPANY John Yates Artesta (A	<u>Now Manico</u> Idress)	
LEASE McClafferty WELL NO.	1 UNIT B S	21 T -19-5 R-38-5
DATE WORK PERFORMED February 1	1958 POQL Undest	gnated
This is a Report of: (Check appropriate	block) Result	s of Test of Casing Shut-of
Beginning Drilling Operations	Remed	lial Work
Z Plugging	Other	
Detailed account of work done, nature a	nd quantity of materia	ls used and results obtaine
		na an ann an Anna an An
1. A 25 sx cement plug was plac	ed at Total Depth	4679'.
2. The5 <sup>1</sup> / <sub>2</sub> " casing was shot at 2 3. A 25 sx cement plug was place		t pulled from the well.
4. A 15 sx cement plug was place	ed in bottom of th	e surface casing.
5. A 10 sx cement plug was place	ed in top of the h	ole.
6. A 4" marker complete with no	cessary informatio	n was placed in the
top of hole 5' above the gro	und.	
	د. ۱۹۹۵ همچند میکارد بروی و بروی و بیوی و از این از این از این	and the second
م الم الم الم الم الم الم الم الم الم ال		· · ·
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e como f	•	
FILL IN BELOW FOR REMEDIAL WOR	KREPORTS ONLY	
Original Well Data:	۰	
DF Elev. TD PBD	Prod. Int.	Compl Date
Thng, Dia Thng Depth	Oil String Dia	Oil String Depth
Perf Interval (s)		
Open Hole Interval Produ	cing Formation (s)	
RESULTS OF WORKOVER:	BEJ	FORE AFTER
Date of Test		
Oil Production, bbls. per day		
Gas Production, Mcf per day	e . <del> </del>	
Water Production, bbls. per day		
Gas-Oil Ratio, cu. ft. per bbl.	·	
Gas Well Potential, Mcf per day	·	
Witnessed by		
		(Company)
OIL CONSERVATION COMMISSION		omplete to the best, of
1101.11	my knowledge.	Stanley Saibin
Name	Name Stanloy	
Title <u>Charling mar</u>	Position Yard Supe	
Date <u>MAR 2.8 1958</u>	Company Hobbs Pi	og and Supply Company

	·		N SEPA				(Bone U-11u)
				NRW BARKIC		ERVATION CON	(LING LONG
						New Mexico	1146231211
					and the second	1885 OFFICE (	
						WAS DIFICE (	000
					WEI2J, J	RECORD	
						1 10	:15
			Mail to Di	strict Office, Oil	Conservation Co	munission, to which i	form C-101 was sent not
				mission, Submit in			in Rules and Regulations Land aubmit 6 Copies
LOCA	AREA 640 AC TE WELL 09	res Rrectly		•		-	
John	A. Yat	e 8			Forest-l	(cclafferty	•
						-	38E , NMPM.
		•					
						• •	East
							·····
Drilling Com	menced	Janu	lary 29,	, 19 <b>57</b> Drillin	g was Completed	*********** <b>*</b> ************************	
Name of 9ri	lling Contra	ctor		Drilling (	30		
							)*************************************
Elevation abc	ove sea level :	at Top of Tubi	ng Head	<b>.</b>	The in	formation given is to	be kept confidential until
••••••		********	, 19	1		•	
			5	L JANDS OR Z	ONES		22 0
No. 1. from.	<u>4478</u>		to 4482		from	<b>to</b>	44118
		· · · · ·	. :		-		
				-	-		*******
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•••	-, ·			BTANT WATER			
			d elevation to which				
•		•	to				- 
No. 2, from		********	to				************
•			to		÷		
No. 4, from		•••••••••••••••••	<b>to</b>	***************************************		.feet	•
s A Anna an Anna	· .			CASING BECOI	BD .	ς.•	
	WEIGE		01	BAND OF	CUT AND		
SIER	PER FO	OT USE		BHOF,	PULLED FBOM	PEEFORATIONS	PURPOSE
			273'	1	1 1	•	
-8 5/8		No				4478-4482.	Surface Production st
		Nev				4478-4482; -4292:4217-4	Production st
		Net		(4318-43	324: 4288	-4292:4217-4	
		Net	4680'	(4318-43 (3690-3)	24; 4288 05; 3488	-4292:4217-4	Production st 213; 3847-3851
			MUDDING	(4318=43 (3690-3)	24; 4288 05; 3488	-4292;4217-4 -3492; 3413-	Production st 213; 3847-3851 3417; 2930-293
	BIZE OF CASING	WHERE	4680'	(4318-43 (3690-3)	24; 4288 05; 3488 ING BECOBD	-4292:4217-4	Production st 213; 3847-3851
	CABING	WHCRE. BET 273	MUDDING NO. BACKB OF CEMENT 180	(4318=43 (3690-3)	324; 4288 205; 3488 ING BECOBD	-4292;4217-4 -3492; 3413-	Production st 213; 3847-3851 3417; 2930-293
	CASING	WHERE.	MUDDING NO. BACES OF CEMENT	(4318=43 (3690-3) AND CEMENTI METROD USED	324; 4288 205; 3488 ING BECOBD	-4292;4217-4 -3492; 3413-	Production st 213; 3847-3851 3417; 2930-293
	CABING	WHCRE. BET 273	MUDDING NO. BACKB OF CEMENT 180	(4318=43 (3690-3) AND CEMENTI METROD USED	324; 4288 205; 3488 ING BECOBD	-4292;4217-4 -3492; 3413-	Production st 213; 3847-3851 3417; 2930-293
	CABING	WHCRE. BET 273	MUDDING NO. BACES OF CEMENT 180 360	(4318=43 (3690-3) AND CEMENTI METROD USED	324; 4288 205; 3488 ING BECOBD	-4292;4217-4 -3492; 3413-	Production st 213; 3847-3851 3417; 2930-293
	CABING	WHICHE BET 273 <sup>1</sup> 4680	MUDDING NO. BACKS OF CEMENT 180 360	(4318=43 (3690-37 AND CEMENTI METHOD DEED CITCULATO	324; 4288 205; 3488 ING BECOBD	-4292;4217-4 -3492; 3413- MUD EAVITY	Production st 213; 3847-3851 3417; 2930-293
Size or Bolz	CASING 8 5/8 <sup>11</sup> 5 2 <sup>11</sup>	WHCRE BET 2731 4680 (Record t	MUDDING MUDDING No. BACES OF CEMENT 180 360 360 Me Process used, No	Circulate PRODUCTION A o. of Qu. or Gala	24; 4288 05; 3488 ING BECOBD	-4292;4217-4 -3492; 3413- MUD EAVITY ION treated or shot.)	Production st 213; 3847-3851 3417; 2930-293 AMOUNT OF MUD USED
5121 - 5121 - 5122 - 1012 - 	CASING 8 5/8 <sup>11</sup> 5 2 <sup>11</sup> 	(Record t	MUDDING MUDDING NO. BACKS OF CEMENT 180 360 BBOOSD OF he Process used, No th 5000 ga	CITCULATA PEODUCTION A o. of Qu. or Gala 11078. hc Gy	24; 4288 05; 3488 ING BECOBD ad- ad- ND STIMULAT	-4292;4217-4 -3492; 3413- MUD EAVITY INN Incated or shot.) 1.2500# Band	Production st 213; 3847-3851 3417; 2930-293 MOD USED
	$\begin{array}{c} c_{ASDYG} \\ \hline 8 & 5/8^{11} \\ \hline 5^{1}2^{11} \\ \hline \\ \hline \\ 934, tr \\ \hline \\ 417, tr \\ 492, tr \end{array}$	(Record t eated wi eated wi	MUDDING NO. BACKS OF CEMENT 180 360 360 2000 DF he Process used, No 1th 5000 ga th 5000 ga th 5000 ga	(4318=43 (3690-37 AND CEMENTI DEED CITCULATO CITCULATO PRODUCTION A 0. of Qu. or Gala 110na heav 1. heavy C	24; 4288 205; 3488 ING BECOBD ad. ad. ad. bd. ND STIMULAT . used, interval 77. 011 GRI 011 & 2500	4292;4217-4 -3492; 3413- MUD EAVITY IN IN Incated or shot.) 1 2500# sand 5# sand, Stu 9 and, Stu	Production st 213; 3847-3851 3417; 2930-293 MODUSED MODUSED
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2930-29 3413-34 3488-34 3690-37 3847-38 4207-421	CASDIG 8 5/8 <sup>11</sup> 5 <sup>111</sup> 5 <sup>1</sup> 5 <sup>1</sup>	(Record t eated wi eated wi ated wit ated wit	MUDDING NO. BACES OF CEMENT 180 360 180 360 110 180 360 110 180 360 110 180 360 110 180 360 110 180 360 110 180 360 110 180 360 110 180 360 110 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 360 100 180 180 360 180 180 180 180 180 180 180 180 180 18	(4318=43 (3690-37 AND CEMENTI DEED CITCULATO C	24; 4288 25; 3488 1NG BECOBD A ad. ad. ND STIMULAT . used, interval 77 011 GR 011 & 2500 011 & 2500 11 & 2500	4292;4217-4 -3492; 3413- 	Production st 213; 3847-3851 3417; 2930-293 MODUST OF MODUSED AMOUNT OF MODUSED
5111	CASDIG 8 5/8 <sup>11</sup> 5 <sup>111</sup> 5 <sup>111</sup> 5 <sup>121</sup> 034, tr 417, tr 492, tr 705, tr 1, tre 1, tre	(Record t eated wi eated wi ated wit fated wit fated wit	MUDDING NO. BACES OF CEMENT 180 360 180 360 110 180 180 180 180 180 180 180 180 18	(4318=43 (3690-37 AND CEMENTI DEED CITCULATO C	24; 4288 25; 3488 1NG BECOBD A ad. ad. A ad. ad. ad. ad. ad. ad. ad. ad.	-4292;4217-4 -3492; 3413- 	Production st 213; 3847-3851 3417; 2930-293 MODUST OF MODUSED AMOUNT OF MODUSED

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	- ·	m	OF DRAFFERRY AND APROVAL TR			
•	If drill-stem or other special tes	ts or ites	dation surveys were made, ubmit report on	ьера	rate sheet and attach here	nio 🕤
		15	. TOOLS USED			
····			A # 0A	÷	а. 	
			10			
Cable toon w	cre uica nortanna antina antina antina		1		······································	itet.
			<b>PRODUCTION</b>			
Put to Produ	cing	2,				1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -
OIL WELL:	The production during the fi	ist 24 ho	urs was	of B	nuid of which <b>QA</b> 1	h1a. off
	•					
	was oil;	% was c <b>bla</b>	water & 70 Bbls. SH water; an	.d 18		sediment, A.P.I.
	Gravity			-	· IIOGTA BAUDUT	
GAS WELL:	The production during the fir	rst 24 ho	urs was			barrels of
	liquid Hydrocarbon. Shut in 1					
			· · · · · ·			
Length of Ti	me Shut in		····			
PLEASE	INDICATE BELOW FORM	ATION	TOPS (IN CONFORMANCE WITH GI	EOG	RAPHICAL SECTION	OF STATE):
	Southeastern	n New b	fexico		Northwestern New	Mexico
T. Anhy		Т.	Devonian	T.	Ojo Alamo	
			Silurian	· T.	Kirtland-Fruitland	
			Montoya	T.	Farmington	
	*******		Simpson	Т.	Pictured Cliffs	
	······		McKee	Т.	Mencfcc	
			Ellenburger	T.	Point Lockout	••••••
			Gr. Wash	Τ.	Mancos	
	cs	-		T.	Dakota	
				Т.		
	••••••••••••••••••••••••••••••••••••••				Penn	
				Т. т		
				1. T	***************************************	
				-		
		4.	FORMATION LECORD			•••••••••••••••••••••••••••••••

From	Te	Thickness in Feet	Formation	From	To	Thickness in Feet	Formation
0	275	274	Surgace.				
275	1327	1052	Red bed				
1327	1758	431	Red bed & Anhydrite				
1758	2816	1058	Salt & anhydrite	Ĩ.	[		
2816	3397	581	Anhydrite & gyp	f .			
3397	3472	75	Anhy., gyp & dolomit		{	1 1	
3472	4040	568	Anhydrite & gyp	í.	-	[	
4040	4120	80	Lime		1		. •
4120	4168	48	Lime & dolomite	ſ.		[ ]	
4168	4219	51	Dolomite	1			
4219	4250	31	Lime & dolomite	1	{	{	
4250	4364	145	Dolomite	1	1		•
4364	4377	13	Lime & dolomits	Î	· ·		•
4377	4400	23	Dolomite	(			-
4400	4473	73	Sandy lime & dolomit	<b>.</b> e			
473	4524	51	Dolomite			[ [	
4524	4550	26	Lime & dolomite		{		
4550	4598	48	Dolomite	<u>f</u>			
1598	4649	51	Lime & Dolomite				
4649	4680	31	Dolomite				
4680	Total	dept	h				
•	1	-					·

ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or affirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

3-12-57	•			•	
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Company.c- Operator. John A. Yates	Addres 312 Carper Bldg., Artesia, N. Max.
Name Mala Ca la	Puttion or Title

										•
	· · · · · · · · · · · · · · · · · · ·		WHEXICO							FORM C103 (Rev 355)
TRAFILE DATES			MISCELL							
11 1		Submit	to oppropulat			as per Cu	mmiss	lon Rule 1	1106)	
Name of Company TEXACO Ir					• 0. B			lobbs,	New	Mexico
		n Limited	ell No. Ur 2	it Letter M	Section	Tewnship		]	Kange 38	3-13
January	5, <sup>d</sup> 1962	Роој Норра			¢	County	I	.ea		
			REPORT OF						•	
Degianing D Duggiag	Drilling Operatio	ns [-] Casin	og Test and C edial Work	ement Jo	ы <u>[</u>	]] Othe: (	Expldin	)):		
-	of work done, n	isture and quantity of		d, and re	sults obtai	ned.				*=-=**
		nd abandoned					:			
2. Cut 2 3. Spot 4. Spot 5. Spot level	2-7/8" ca 25 sx ce 25 sx ce 12 sx su 1, clean	ment plug, 3 sing at 1265 ment plug, 1 ment plug, 4 rface plug, location for Complete 2:	5; recove 165' to 00' to 5 1nstall inspect 30 A. M	er se 1265 500' 4" m tion	me ' arker as per	NMOCC	reg	4' abc ulatic	ove ons.	ground Plug
Oil Vitnessed by		FILL IN BELO	Position Product:	M. J: ion F EDIAL V WELL	oreman Vork RE	company TEX PORTS O	ACO NLY	Inc.	Сотр	W Mexico
Oil Witnessed by OF Elev. Subing Diameter	C. F. Ja	tion Commission	Position Producti W FOR REMI ORIGINAL	M. J: ion F EDIAL V WELL	oreman Vork RE	company TEX PORTS O	ACO NLY	Inc.	Сотр	
Oil Vitnessed by OF Elev. Tubing Diameter	C. F. Ja	tion Commission ckson FILL IN BELO	Position Producti W FOR REMI ORIGINAL	M. J: ion F EDIAL V WELL	oreman Vork RE	company TEX PORTS O	ACO NLY	Inc.	Сотр	
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	lune we have a							(Furer C-265)
				MR.97 MPSCV	20.04.0038	UNITATION (CONTRACTOR)	COMPLESION	r
<u> </u>				**************************************		New Marico	11717-1734A38674V	· ·
					control a cy	ANGW DIMUSILOUP		
						·		
					WELL H	RECORD		
			Mall on Die	date Office Off	Contempolies Co		hich Vorta C-101	
			later then tw	enty days after o	completion of we	1. Follow instru	ctions in Rules an	d Regulationa
<u> </u>	AREA MO ACH	<u></u>	of the Comm	inion. Submit in	QUINTUPLIO	A.LB. 11-2	tete Land submit	t 6 Copies
	AREA 440 ACR	ILCOTLY		No	rdon Corpor	ntion Tim	tod	
TEXAL	O Inc.	COLIDARY OF OD	Ta(07)	NU.		Lean (Lean)		4 + + = 4 4 4 + + + + + + + + + + + + +
ALL No				1/ of Sec	15 T	•		NKPM
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			itate Land the Oil an					
rilling Cor	nmenced N	ovember 1		19.61 Drillin	g was Completed	Novem	ber 10	, <u>1951</u>
une of Dr	illing Contract	or	ackle Drillin	g Company				
			2076					
			ng Head					
	ove sea level at			and the second	A The In	tormation given	H to be kept con	ngential unul
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			OII	L BANDS OR Z	ONTES			
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	זסרה(	· · ·	<u>. 4127 !</u>		41 (mm )1]	581 701	416-	1
. 3. fr 7. rill.	4134 • with Rota	ary tools	and no water	sands tes	sted.		to	·····
				TANT WATER				
clude data	on rate of wa	ter inflow and	elevation to which	water rose in hol	с.			
o, 1, from.		• • • • > • • • • • • • • • • • • • • •	to	******		feet	*****	
. 2, from.				*****		fcct		
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4, Irom.			to				********	
•			,	CASING RECO	RD			•
812E	WFIOIT PER POO	T NEW T USK	D AMOUNT	KIND OF SHOE	CUT AND PULLED TROM	PERFORATIO	DNS PUI	upose
-5/8"	24.00	New		Howco	None	None	Surfa	And and the owner of the owner of the owner of the owner.
-7/8"	6.40	New	<u></u>	Номсо	1265	See Above	e Produ	ction
·			· · · · · · · · · · · · · · · · · · ·	· · ·	<u> </u>			<u> </u>
<del>.</del>								
			MUDLING	AND CEMENT	ING RECORD			
EIZE OF	SILE OF	WRERE	NO. SACES	METROD		משא	AMOUNE	0F ;
<u> </u>	CABINO	SET	OF CENENT	UBED	a	RAVITY	MUD US	ED
-7 <u>/8</u> "	7-5/8"	1,51 1	200	Номер				
3/4"	2-7/8"	42061	550	Howyo			· · ·	
							· .	
			Dream An -	non north a			- -	
			RECORD OF P	NODOGTIUN A	UND STUMULAT	ION		
	•		he Process used, No.					
prforat	a 2-7/8"	casing LT	100 to 4108 .	1119 to	1127 ·, 1131	1 to 61651	, 41491 to	L15L · ,
1581 to	17651 1	1701 to ]	176" and 4180	to Ja Por	with 2 let	; shots nor	ft. Acidi	ze

with 3000 gals 15% LSTNEA, 250 lbs. crushed Napthalene, and 250 gals Gel Acid. Frac

with 10,000 gals refined oil, 5000 3bs. sand, and 250 lbs Adomite.

With 10,000 gals refined oil. 5000 3bs. wand, and 250 lbs Adomite. Result of Production Stimulation Dry. Verbal permission received to plug and abandon Well from New Mexico Oil Conservation Commission. 1:30 P.M., January L, 1962.

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ATTACH SEPARATE SHEET IF ADDITIONAL SPACE IS NEEDED

I hereby swear or aftirm that the information given herewith is a complete and correct record of the well and all work done on it so far as can be determined from available records.

	H. N. Wado January 5.	1962
Company or Operator. TEXACO Inc.	Address P. O. Box 728, Hobbs New	
Name 7.1.7.1.7. Or a Dominant account	Foundar Title Assistant Distric	<u>vende</u>

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Farge 2 - ALL CONSERVATION CONSTANT

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APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

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THE FOLLOWING ITEMS	ATTACHED TO	PLAT OF AREA		+ <del>e</del> .	IGB	LOG		DIAGRAMI	MATIC SKETCH OF WELL
S APPLICATION (SEE TUI	E 701-8)	Yes			Yes			Yei	•
	ereby certif	that the infor	mation above is	true and	complet	e to the	best of my know	ledge and	belicf.
7.4.	Port	ler	Divi	sion	Mana	ger	_	Janu	ry 17, 1977
(Sie	nature B.	Googne	art		(Title)				(Date)
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									ion for a period of 15 d iod no protest has been
ceived by the	Santa Fe of	fice, the app	lication will be	process	ed. If a	protest	is received, th	e applicat	ion will be set for hear





A Z CO. --- WICHITA --- HERCULENE 151543

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Amoco Production Company P.O. Drawer A Levelland, Texas 79336

V. E. Staley Area Superintende it

February 1, 1977

File: CDC-501.61-34

Re: Conversion of Abandoned Well to Salt Water Disposal Service, Hobbs Salt Water Disposal System, Lea County, New Mexico

Mr. L. B. Goodheart Division Manager Rice Engineering & Operating, Inc. P. O. Box 1142 Hobbs, NM 88240

Dear Mr. Goodheart,

.moco has no objection to the use of the abandoned well located in the SE/4 SE/4 of Section 16, Township 19 South, Range 38 East, Lea County, New Mexico, for salt water disposal service. Disposal will be into the San Andres formation over the openhole section from 4,176 feet to 5,500 feet. All available information confirms there is no productive pay over this interval.

HAK, Jr:kr

Ì	BEFORE EXAMINER STAMETS OIL CONSERVATION COMMISSION
	Rice EXHIBIT NO. 6
	CASE NO. 5860
	Submitted by Goodheart
	Hearing Date Jeb 16, 1977






Amoco Production Company P.O. Drawer A Levelland, Texas 79336

V. E. Staley Area Superintenden

February 1, 1977

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## WORKOVER PROCEDURE Hobbs SWD System Well P-16

Workover procedure to convert P/A Nearburg & Ingram-Ohio State Well No. 1, located 660' FSL and 660' FEL Section 16, T19S, R38E, Lea County, New Mexico to salt water disposal well for Hobbs SWD System:

- 1. MIRU pulling unit and reverse unit. Install BOP on 8-5/8" casing.
- 2. Run 7-7/8" steel tooth bit and 4-4-3/4" drill collars on 2-7/8" OD EUE drill string and drill cement plugs at: Surface, 4125' to 4225' (bottom of 8-5/8" casing) and 5000' to 5100'. Clean 7-7/8" open hole to top of cement plug at 5500' and displace drilling fluid out of well with clean salt water. Release reverse unit.
- 3. Run 6-5/8" Lynes open hole straddle packers spaced 350' apart on 2-7/8" drill string. Acidize zones of porosity from 4300-5450', (5450-5100', 5100-4750' and 4650-4300') with 3000 gals. 15% reg. Hcl acid each zone (total of 9000 gals.) Pull packer back in 8-5/8" casing and take maximum injection test. If rate is sufficient (400 BPH), pull 2-7/8" drill string & lay down.
- 4. Lower wellhead so that  $4\frac{1}{2}$ " tubing flow tee will be approx. 3' below ground level. Run  $4\frac{1}{2}$ " plastic lined tubing and nipple up for disposal operation. Release pulling unit after  $4\frac{1}{2}$ " tubing run in well.

WJC/jp 1-31-77 Revd. LBG/jp 2-14-77

BEFORE EXAMINER STAMETS
OIL CONSERVATION COMMISSION
Rice EXHIBIT NO. 5
CASE NO. 3-8 60
Submitted by Gradheat
Hearing Date 7416, 977

Docket No. 7-77

Dockets Nos. 8-77 and 9-77 are tentatively set for hearing on March 9 and March 23, 1977. Applications for hearing must be filed at least 22 days in advance of hearing date.

DOCKET: EXAMINER HEARING - FRIDAY - FEBRUARY 11, 1977

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

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

<u>CASE 5872</u>: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider the suspension of Rules 15(A) and 15(B) of the General Rules for Prorated Gas Pools as promulgated by Order No. R-16/O, as amended, to permit overproduced wells to continue to produce gas during the present severe weather conditions without danger of being shut in for overproduction.

Docket No. 6-77

#### DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 16, 1977

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

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

- ALLOWABLE: (1) Consideration of the allowable production of gas for March, 1977, from seventeen prorated pools in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico.
  - (2) Consideration of the allowable production of gas for March, 1977, from four prorated pools in San Juan, Rio Arriba, and Sandoval Counties, New Mexico.
  - (3) Consideration of purchaser's nominations for the one-year period beginning April 1, 1977, for both of the above areas.
- CASE 5855: Application of Amoco Production Company for an unorthodox gas well location. San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Elliott Gas Com "F" 1-R Well No. 1A to be drilled 1244 feet from the South line and 820 feet from the East line of Section 33, Township 30 North, Range 9 West, Blanco Mesaverde Pool, San Juan Cour /, New Mexico.
- <u>CASE 5857</u>: Application of Union 011 Company of California for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter its Pipeline Deep Unit Federal Well No. 3, the surface location of which is 1980 feet from the North and East lines of Section 7, Township 19 South, Range 34 East, Lea County, New Mexico, and to directionally drill said well in a southerly or easterly direction and complete it in the Morrow formation at a point no closer than 330 feet to the outer boundary of the proration unit, the E/2 of said Section 7.
- CASE 5858: Application of Union Oil Company of California for 320-acre specing, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the adoption of 320-acre spacing and proration units for the North Quail Ridge-Morrow Gas Pool, Lea County, New Mexico. In the absence of objection, the Commission will adopt such 320-acre spacing.

#### CASE 5859: (This case will be continued and readvertised.)

Application of Caulkins Oil Company for 'ownhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle Basin-Dakota and Blanco-Mesaverde production in the wellbore of its Breech D Well No. 307 located in Unit M of Section 13, Township 26 North, Range 7 West, Rio Arriba County, New Mexico.

Application of Rice Engineering & Operating, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced selt water into the San Andres formation through the open hole interval from 4176 feet to 5500 feet of its Hobbs SWD Well No. P-16, located in Unit P of Section 16, Township 19 South, Range 38 East, Hobbs Field, Lea County, New Mexico.

Examiner Hearing - Wednesday - February 16, 1977

Docket No. 6-77

<u>CASE 5861</u>: Application of Hanson Oil Corporation for a salt water disposal well, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Deleware formation in the open hole interval from 19.6 to 1978 feet in its Sulphate Sister Well No. 1, located in Unit E of Section 13, Township 25 South, Range 26 East, Eddy County, New Mexico.

<u>CASE 5862</u>: Application of Palmer Oil and Gas Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Federal 1 Well No. 1 located 1525 feet from the South line and 820 feet from the East line of Section 1, Township 31 North, Range 13 West, Blanco Mesaverde and Basin-Dakota Pools, San Juan County, New Mexico.

CASE 5863: Application of Amerada Hess Corporation for an unorthodox oil well location, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Jicarilia Apache "B" Well No. 10, completed as an oil well in the Dakota formation at a point 1850 feet from the South Jine and 1500 feet from the West line of Section 29, Township 25 North, Range 5 West, Rio Arriba County, New Mexico, said well having been projected as a Basin-Dakota gas well at a standard gas well location for said pool.

CASE 5864: Application of Agua, Inc. for the amendment of Order No. R-5137, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the further amendment of Order No. R-5137, which authorized the disposal of produced salt water into the San Andres formation through the open-hole interval from approximately 4000 feet to 5000 feet in applicant's Plinebry-Drinkard SWD System Well No. A-22, located in Unit A of Section 22, Township 22 South, Range 37 East, Blinebry-Drinkard-Langlie Mattix Area, Lea County, New Mexico. Said order, as amended, limited surface injection pressures to 800 pai, and applicant seeks its amendment to permit surface injection pressures up to 1500 psi.

<u>CASE 5865</u>: Application of Inexco Oil Co. for 320-acre spacing, Lea County, New Mexico. Applicant, in the abovestyled cause, seeks the adoption of 320-acre spacing and protection units for the West Tonto-Pennsylvanian Gas Pool, Lea County, New Mexico. In the absence of objection, the Commission will adopt such 320-acre spacing.

CASE 5866: Application of Union Texas Petroleum for an exception to casing and cementing requirements of Order No. R-111-A, Lea County, New Mexico. Applicant, in the above-styled cause, seeke an exception to the casing and cementing requirements of Order No. R-111-A to eliminate the salt protection string in a well it proposes to drill in Unit D of Section 33, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, Lea County, New Mexico.

<u>CASE 5867</u>: Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the S/2 of Section 19, Township 21 South, Range 27 East, Burton Flat Field, Eddy County, New Mexico, to be dedicated to its Forrest Well No. 1 to be located in Unit N of said Section 19. Also to be considered will be the cost of 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 zisk involved in completion of said well.

### CASE 5820: (Continued from the February 2, 1977, Examiner He ring.)

Application of Texas Oil & Gas Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Wolfcamp and Pennsylvanian formations underlying the W/2 of Section 4, Township 22 South, Range 26 East, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. 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 5868: Application of Harvey E. fates Company for an unorthodox ges well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Travis Deep Unit Well No. 1 to be drilled 1980 feet from the South line and 1684 feet from the West line of Section 13, Township 18 South, Range 29 East, Eddy County, New Mexico, the S/2 of said Section 18 to be dedicated to the well.

#### CASE 5846: (Continued and Paaivertised)

Application of hervey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Empire South Deep Unit Well No. 13 to be drilled 660 feet from the South line and 1432 feet from the West line of Section 30, Township 17 South, Range 29 East, South Empire Field, Eddy County, New Mexico, the S/2 of said Section 30 to be dedicated to the well. Examiner Hearing - Wednesday - February 16, 1977

Docket No. 6-77

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- CASE 5869: Application of Harvey E. Yates Company for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the aboya-styled cause, seeks approval for the unorthodox location of its Big Boggy Well No. 1 to be drilled 990 feet from the South line and 2080 feet from the East line of Section 36, Township 17 South, Range 26 East, Atoka Pennsylvanian Gas Pool, Eddy County, New Mexico, the S/2 of said Section 36 to be dedicated to the well.
- CASE 5870: Application of Harvey E. Yates Company for an unorthodox gas well location, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its South Maljamar Deep Unit Well No. 2 to be drilled 990 feet from the South line and 1980 feet from the West line of Section 30, Township 17 South, Range 32 East, Lea County, New Mexico, the S/2 of said Section 30 to be dedicated to the well.
- CASE 5871: Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Friendly Frenchman Well No. 1 to be drilled 1005 feet from the South line and 660 feet from the East line of Section 32, Township 16 Scuth, Range 26 East, Eddy County, New Mexico, the S/2 of said Section 32 to be dedicated to the well.

### CASE 5810: (Continued from the February 2, 1977, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Pddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Stonewall "EP" Com Well No. 1, located in Unit F of Section 30, Township 20 South, Range 28 East, Eddy County, New Mexico, to produce gas from the North Burton Flat-Wolfcamp Gas Pool and an undesignated Morrow gas pool.

## CASE 5847: (Continued from the February 2, 1977, Examiner Hearing)

Application of Yates Petroleum Corporation for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Cossett "EU" Well No. 1, located in Unit K of Section 26, Township 17 South, Range 25 Fast. Eddy County, New Mexico, in such a manner as to produce gas from the Lower Wolfcamp or Upper Pennsylvanian and the Lower Pennsylvanian formations through the casing-tubing annulus and tubing, respectively.

### CASE 5848: (Continued from the February 2, 1977, Examiner Rearing)

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Application of Yates Petroleum Corporation for an unorthodox gas well location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Pipkin HE Well No. 1 to be drilled 660 feet from the South and West lines of Section 4, Township 18 South, Range 25 East, Eddy County, New Mexico, the S/2 of said Section 4 to be dedicated to the well.

# EXHIBIT "D"

## PRODUCTIVE FORMATIONS OF WELLS WITHIN A TWO-MILE RADIUS OF PROPOSED HOBBS SWD WELL P-16

	COMPANY Amogo	LEASE South	Норра	WELL NO.	FORMATION
Hard Street		(GSA)		62	Grayburg-San Andres -466 to -582'
	- 11	11	2* *	63	Grayburg-San Andres -496 to -655'
	91 91	11		64	Grayburg-San Andres -492 to -585'
	<b>8</b> 1	Ĥ	· · · · ·	65	Grayburg-Son Andres -426 to -514
	44	ŧi		66	Grayburg-San Andres -414 to -624'
				67	Grayburg-San Andres -384 to -596'
		·		68	Grayburg-San Andres -459 to -590'
	<b>\$1</b>	11		69	Grayburg-San Andres -509 to -672'
	Ħ	11		70	Grayburg-San Andres -454 to -534'
ł	**	83		71	Grayburg-San Andres -391 to -465'
*	u.	11		72	Grayburg-San Andres -387 to -457'
	\$*	H		73	Grayburg-San Andres -512 to -667'
	x ()	ti.		74	Grayburg-San Andres -384 to -586'
	Û	<b>B</b> E		75	Grayburg-San Andres -439 to -618'
	<b>\$</b> 4	ti -		76	Grayburg-San Andres -401 to -558'
•	ατα το το το το 1	, tt	* * <u>* *</u> * *	77	Grayburg-San Andres -394 to -595'
	17	11		<b>7</b> 8	Grayburg-San Andres -467 to -660'
	21 21	15		79	Grayburg-San Andres -507 to -585'
-	26	. 13		80	Grayburg-San Andres -530 to -568'
	<b>8</b> 1	11		81	Grayburg-San Andres -496 to -543'
	tt .	. 91		82	Grayburg-San Andres -417 to -505'
	<b>3</b> F	<b>#</b> 1		83	Grayburg-San Andres -421 to -600'
	13	H	•	84	Grayburg-San Andres -409 to -618'
	<b>1</b> +	31		85	Grayburg-San Andrea -550 to -570'
1	<b>8</b>	11	•	86	Grayburg-San Andres -501 to-609'
	81	41		87	Grayburg-San Andres -475 to -632'
•	86	11		88	Grayburg-San Andres -386 to -580'
1.0	83	ti i		89	Grayburg-San Andres -500 to -615'
		Ħ		90	Grayburg-San Andres -464 to -524'
	<del>11</del>	n		91	Gray Lirg-San Andres -450 to -597'
*	<b>1</b> 7	n	•	92	Grayburg-San Andres -439 to -600'
	*1	11		93	Grayburg-San Andres -480 to -588'
	. 11	**		94	Grayburg-San Andres 4016 to 4177' Elev. not available
	**	'n		95	Grayburg-San Andres -477 to -585'
21	81	<b>1</b> 1		96	Grayburg-San Andres -465 to -593'
-	<b>67</b>	81		97	Grayburg-San Andres -575 to -612'
	<b>2</b> >	\$1		98	Grayburg-San Andres -467 to -512'
		81		99	Grayburg-San Andres -452 to -506' T/A
	<b>11</b>	81		100	Grayburg-San Andres -547 to -566'
	<b>\$1</b>	93		101	Grayburg-San Andres -411 to -574'

-1-

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COMPANY	LEASE	WELL NO.	FORMATION
Amoco Contd.			
51	(GSA) Unit	102	Grayburg-San Andres -545 to -579'
		103	Grayburg-San Andres -409 to -584'
n		104	Grayburg-San Andres -569 to -598'
		105	Grayburg-San Andres -472 to -525'
17	81	106	Grayburg-San Andres -477 to -563'
<b>9</b> 1	11	107	Grayburg-San Andres -402 to -582'
\$1	11	108	Grayburg-San Andres -473 to -517'
11	<b>\$1</b>	109	Grayburg-San Andres -404 to -584'
₽ <b>01</b>	n	110	Grayburg-San Andres -482 to -634'
11	17	111	Grayburg-San Andres -497 to -5841
01	<b>†</b> 1	34	Paddock -768 to -772' T/A
·· <b>n</b>	H. T. Orcutt	1	Grayburg-San Andres -398 to -498'
<b>11</b>	Terry et al	1	Grayburg-San Andres 4140 to 4194' Elev. not available
Christman	J. Hughes	1	4011' P/A
Cone	Will Terry	1	Grayburg-San Andres -469 to -514' P/A
Energy	Foster B	1	Drinkard -3607 to -4004'
17	Foster C	1	Drinkard -3119 to 3264'
Felmont	Terry	1	-817' TD P/A
R. Lowe	F. Selman	1	-3886 to -4031' P/A
Marathon	State Sec. 9	1	South Bowerg-Seven Rivers +407 to +267'
Martindale	Selman	1	Grayburg-San Andres 4202 to 4250' P/A
Moran	Etal	1	-670 to -702' Dry hole P/A
Pan American	A.L.Foster A	1	Blinebry, Drinkard -2542 to -3358 to -2652' -3462' P/A
Rice Eng.	Hobbs SWD	E-15	Lower San Andres -1063 to -1215'
Shenandoah	W. Terry	1 5	Drinkard -3135 to -3288' P/A
Shell	Terry	1	-640' TD Dry hole
	Mexico "U"	2	Grayburg-San Andres -469 to -554'
•	Bordages etal		-6689' Dry hole
	Terry Tract		4071 to 4185' Elev. not avail. P/A
jt	Wright	6	4275' TD Dry hole P/A
Texaco	J. H. Moore		-480 to -528' P/A
1	N. Corp. Ltd.		-501 to -583' P/A
US Smelt.		1	-569 to -618' dry, -3437 to -4279' dry P/
Forest	Yates	1	San Andres -872 to 876' P/A
T ~ ~ ~ 0 4		•	

-2-

application of Rice Engineering & Operating, one for salt water disposal, dea County, nm. Applicant in the above- styled cause seeks authority to dispose of produced Salt water into the San Ordres formation through the open hole Vinterval from: 4176 feet to 5500 feet of its Mearburg & Ingram-Ohio State mee no! 1, located in Thit P of Section 16, Township 19 South, Range 38 East, Hobbs Field Sea County, new mexico.

RICE Engineering & Operating, Inc. Post Office Box 1142 Telephone (505) 393-9174

> HOPES. NEW ME 100 88240 January 17, 1977

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico 87501

Case 5860

Re: Rule 701, "njection of Fluids into Reservoirs (Salt Water Disposal)

## Gentlemen:

Rice Engineering & Operating, Inc. as operator of the Hobbs Salt Water Disposal System, Lea County, New Mexico, hereby respectfully applies for a hearing to be held before the New Mexico Oil Conservation Commission for the purpose of securing a permit under Rule 701 to recomplete the abandoned Nearburg & Ingram-Ohio State Well No. 1, located in the SE/4 SE/4 Section 16, Township 19 South, Range 38 East, Lea County, New Mexico, as the Hobbs SWD System Well No. P-16, with salt water disposal into the San Andres formation.

Rice Engineering & Operating, Inc. further deposes and states the following:

- A. That said well is located 660' FSL and 660' FEL of Section 16, Township 19 South, Range 38 East, Lea County, New Mexico (see Exhibit "A").
- B. That said well was drilled as an unsuccessful deep test (TD 10,008') for possible productive formations with drilling complete on February 19, 1960 and plugging and abandonment completed on February 24, 1960.
- C. That said well has 13-3/8" OD casing set at 292 feet and 8-5/8" OD casing set at 4176 feet with cement circulated to the surface on both strings (see Exhibit "B").

Page 2 - Oil Conservation Commission - 1-17-77

- D. That said well will be completed as a disposal well in the San Andres formation by (1) cleaning out to top of the cement plug at 5500 feet (base of San Andres formation), (2) installing 4½" OD F. L. tubing to 4176 feet and (3) disposing of produced water in the open hole section from 4176 feet to 5500 feet.
- E. That the salt water to be injected is produced in the Hobbs Field.
- F. That the volume of salt water to be disposed shall be approximately 5500 barrels per day.

Therefore, Rice Engineering & Operating, Inc. requests that the Secretary of the New Mexico Oil Conservation Commission set a date for this application to be heard, and after said hearing, to grant this permit to dispose of salt water in the Hobbs SWD Well No. P-18.

Yours very truly, ENGINEERING & OFERATING, INC. RICE/ L. B. Goodheart Division Manager

LBG/jp

Attachments: Form C-108 Exhibit "A" Exhibit "B" Exhibit "C" Exhibit "D" Electrical Log

Form C-108 Revised 1-1-65 5860 Case

NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERANDA			ADDRESS	<u> </u>	·		·····
Rice Engineerin			P. 0	. Box	1142, Hol	obs, 1	New Mexico
Hobbs Salt Wate	Syste r Disposal	P-16	Норр	9	w		Lea
	P .w	LL IS LOCATED	660		South		660
UNIT LETTER		LL IS LOCATED		FROM THE		.INC AND	OUU
East LINE, SECTION	<u>16 точ</u>	CASING	RANGE 3		<u>нмрм.</u>		*
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CE	MENT	TOP OF CEME	ENT	TOP DETERMINED BY
ATALE CADING	13-3/8	292	300		Surface	ł	Visual
TERMEDIATE		<			00000		120442
ING BTRING				<b></b>			
BING	8-5/8	4176	2200		Surface		Visual
UING .	42	4160			ubing-casi		floating oil
ME OF PROPOSED INJECTION FO	RMATION		TOP OF F	SEMATION		AOTTOM	OF FORMATION
San Andres	SING, OR ANNULUS?	PERFORATION			S 4210	San	Andres 5525
Tubing		open 1	hole	4176	to 5500 (	(-572	to -1896)
THIS A NEW WELL DRILLED FOR SPORALT NO	NO, FOR WHAT PURPO	SE WAS WELL ORI	SINALLY DR	ILLED?	HAS WELT	L EVER BEEN PERFORATED IN A HER THAN THE PROPOSED INJEC	
ST ALL SUCH PERFORATED INTE	AVALS AND SACKS OF CE	MENT USED TO SEAL	OFF OR SQUEEZE E	ACH			
NODE FTH OF BOTTOM OF DEEPEST ESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM O	F NEXT HIGHER		DEPTH OF TO	P OF NEXT	LOWER
. 11	nknown	4210 (GTT			-2542	SSTI	Drinkard)
TICIPATEC DAILY I MINIMUM	7000		CLOSED		ECTION TO BE BY GRA UNET 2.Vity	VITY OR	APPROX. PRESSURE (PSI)
SWER YES OR NO WHETHER THE ALIZED TO SUCH A DEGREE AS T OCA. TRRIGATION, OR OTHER CEL	POLLOWING WATERS AR	E MIN- WATER	TO BE DISPOSED		AL WATER IN DISPO-	1	ER ANALYSES ATTACHED?
ME AND ADDRESS OF SURFACE C		1 4	68 ND)		Yes	No	
Uriel T. McNei	11, Box 686	, Hobbs, 1	New Mexi	<u>co 88</u>	240		
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moco froductro	ii oompaniy,	Dox CC, II	0000, 10	H IIOA	100 00240		<del>````````````````````````````````</del>
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				<u> </u>			
VE COPIES OF THIS APPLICATIO	N SEEN I SURFACE OWN	EA	EACH OPE	ATOR WITH	IN ONE-HALF MELE	THE NEW	MEXICO STATE ENGINEER
T TO EACH OF THE FOLLOWING	Yes		ор тная и УС	B		Yes	
APPLICATION (SEE RULE TOT	HED TO PLAT OF AREA	,	ELECTRIC.			Yes	MATIC SKETCH OF WELL
I hereby		ormation above is			best of my know!		
Y [h	Alina				-	_	10 1000
(Signaru	B. Goodhe		<u>sion Man</u> (Tule		·	Janua	(Date)

UIE: Should watvers from the State Engineer, the surface owner, and all operators within one-half mile of the proposed injection well. not accompany this application, the New Maxico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been received by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.



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R 38 E Go Tites 4 oc ¥<sup>43</sup> **4**8 53 # 54 • **455** Morathan H.B.P. A-3071 JMRely Onla-St Byrom B-244 Sulfø E-3290 5441 HOBB UNIT BG SA U Ges Pet. 10-609 10-20 0d 3 1.019 Stote Murrel McNeille RuthFrincheille \$ł; lorai) State <u>;</u>;; Chas. B. Cochra 29.77 Mork A.R.Co H B.P B-150 Gulf HLB P B-243 Amoco H B P A 1573 ol Felmant Terry 1244(3 (2) X03 Cru Mork Pro 10 28 9010 18 11 6 78 Aztec 4210 A.R.Co r - Sein 9 11 \*\*\*\*\*\* Alcor Murie Buth Furrey Getty Ou Bills Har State 243 1.30 mg Т C 11 э 19 Mork Prod. BS Brooks 26:547 1251 4.1.83 Store 18049 Ferinzoil 2 + 1 + 82 14812 34.1218 134684 Terry 5-e-015-0410 -044114 . O is: S Mork Prod. 124233 Cerscagi 20 ta: 6 Mork Produ Penn g Disc 126 11812 Nei46 F46 U.S., Mi <u>الع</u>ن ( Hawk-ol, Mi Marilyn Cates (3) 38 Blakey, M. M. McNeill U.S., MI Mercia ۲ MerkPred. 7 - 23 - 80 01 813 01 3 1. 13 1. ଭ Corper-Lin TO 9126 Dia 6-29 61 Geo MiGregory 30-°iay ¢ ™e 29 28 ٩ Ruth T. Furneoux, MI D.B. Muriel T. Mcfiein D.B. Ruth T. Fu Ruth T. Fu , , ଚ୍ଚ 1/or LEA COUNTY, NEW MEXICO

EXHIBIT C	,1
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· · · · · · · · · · · · · · · · · · ·	AREA PLAT HOBBS SWD WELL NO. P-16	$1^{"} = 4000$
•	Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.

# EXHIBIT "D"

## PRODUCTIVE FORMATIONS OF WELLS WITHIN A TWO-MILE RADIUS OF PROPOSED HOBBS SWD WELL P-16

COMPANY Amoco	LEASE South Hobbs	WELL NO.	FORMATION
MILOCO	(GSA) Unit	62	Grayburg-San Andres -466 to -582'
n	11	63	Grayburg-San Andres -496 to -655'
11	II	ó4	Grayburg-San Andres -492 to -585'
ti .	н	65	Grayburg-San Andres -426 to -614'
tt	н	66	Grayburg-San Andres -414 to -624'
	11	67	Grayburg-San Andres -384 to -596'
u,	11	68	Grayburg-San Andres -459 to -590'
11	ît	69	Grayburg-San Andres -509 to -672'
88	n	70	Grayburg-San Andres -454 to -534'
51	n	71	Grayburg-San Andres -391 to -465'
11	n	12	Grayburg-San Andres -387 to -457'
11	11	73	Grayburg-San Andres -512 to -667'
	п	74	Grayburg-San Andres -384 to -586*
<b>n</b> -	ti	75	Grayburg-San Andres -439 to -618'
<b>11</b>	tt	76	Grayburg-San Andres -401 to -558'
13	31	77	Grayburg-San Andres -394 to -595'
11	11	78	Grayburg-San Andres -467 to -660'
R	tr i	79	Grayburg-San Andres -507 to -585'
11	11	80	Grayburg-San Andres -530 to -568'
<b>11</b>	11	81	Grayburg-San Andres -496 to -543'
ti	31	82	Grayburg-San Andres -417 to -505'
<b>11</b>	1	83	Grayburg-San Andres -421 to -600'
ŧ	81	84	Grayburg-San Andres -409 to -618'
<b>B1</b>	8	85	Grayburg-San Andres -550 to -570'
<b>1</b>	. <b>št</b>	86	Grayburg-San Andres -501 to-609'
\$2. · · · ·	11	87	Grayburg-San Andres -475 to -632'
£8	ft	88	Grayburg-San Andres -386 to -580'
<b>!!</b>	- <u>.</u>	89	Grayburg-San Andres -500 to -615'
11	*1	90	Grayburg-San Andres -464 to -524'
39	91	91	Grayburg-San Andres -450 to -597'
ti -	31	92	Grayburg-San Andres -439 to -600'
<b>31</b>	<b>\$1</b>	93	Grayburg-San Andres -480 to -588'
11	11	94	Grayburg-San Andres 4016 to 4177' Elev. not available
n	<b>\$</b> 1	95	Grayburg-San Andres -477 to -585'
ti	n	96	Grayburg-San Andres -465 to -593'
<b>£1</b>	11	97	Grayburg-San Andres -575 to -612'
Ħ	11	98	Grayburg-San Andres -467 to -512'
11	It	99	Grayburg-San Andres -452 to -506' T/A
tt.	IT	100	Grayburg-San Andres -547 to -566'
fr	ti i	101	Grayburg-San Andres -411 to -574?

-1-

	LEASE	WELL NO.	FORMATION
Amoco Contd.	South Hobbs (GSA) Unit	102	Grayburg-San Andres -546 to -579'
11	(UDII) 011-0	103	Grayburg-San Andres -409 to -584'
1)	ti	104	Grayburg-San Andres -569 to -598'
	· • • • • •	105	Grayburg-San Andres -472 to -525'
	71	106	Grayburg-San Andres -477 to -563'
n	11	107	Grayburg-San Andres -402 tc -582'
	II	108	Grayburg-San Andres -473 to -517'
11	1f	109	Grayburg-San Andres -404 to -584'
n	11	110	Grayburg-San Andres -482 to -634'
11	11	111	Grayburg-San Andres -497 to -584'
11 .	ti	34	Paddock -768 to -772' T/A
11	H. T. Orcutt	1 .	Grayburg-San Andres -398 to -498'
	Terry et al	1	Grayburg-San Andres 4140 to 4194' Elev. not available
Christman	J. Hughes	1	4011' P/A
Cone	Will Terry	1	Grayburg-San Andres -469 to -514' P/A
Energy	Foster B	1	Drinkard -3607 to -4004'
11	Foster C	1	Drinkard -3999 to 3264'
Felmont	Terry	1	-817' TD P/A
R. Lowe	F. Selman	· 1	-3886 to -4032' P/A
Marathon	State Sec. 9	1	South Bowers-Seven Rivers +407 to +267'
Martindale	Selman	1	Grayburg-San Andres 4202 to 4250' P/A
Moran	Etal	1	-670 to -702' Dry hole $P/A$
-	A.L.Foster A	1	Blinebry, Drinkard -2542 to -3358 to -2652' -3462' P/A
	Hobbs SWD	E-15	Lower San Andres -1063 to -1215
Rice Eng.	W. Terry	1	Drinkard -3135 to -3288' P/A
	Terry	1	-640' TD Dry hole
Shell	Mexico "U"	2	Grayburg-San Andres -469 to -554'
Skelly	Bordages etal	1	_6689' Dry hole
Sohio	Terry Tract	1	4071 to 4185' Elev. not avail. P/A
Stanolind "	Wright	6	4275' 'ID Dry hole P/A
	J. H. Moore	1	-480 to -528' P/A
Texaco	N. Corp. Ltd.	2	-501 to -583' P/A
	Bordages	- 1	-569 to -618 dry, -3437 to -4279 d
US Smelt.	Yates	1	San Andres -872 to 876' P/A
Forest	Tanap	-	

-2-

dry P/A

RICE Engineering & Operating, Inc.

Fost Office Box 1142

Telephone (505) 393-9174

HOBBS. NEW MEXICO 88240 January 17, 1977

Case 5860

ما مالان المام المحمد المالية. معنى والمالة المالية المالية الم

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico 87501

Re: Rule 701, Injection of Fluids into Reservoirs (Salt Water Disposal)

Gentlemen:

Rice Engineering & Operating, Inc. as operator of the Hobbs Salt Water Disposal System, Les County, New Mexico, hereby respectfully applies for a hearing to be held before the New Mexico Oil Conservation Commission for the purpose of securing a permit under Rule 701 to recomplete the abandoned Hearburg & Ingram-Ohio State Well No. 1, located in the SE/4 SE/4 Section 16, Township 19 South, Range 38 East, Les County, New Mexico, as the Hobbs SWD System Well No. P-16, with salt water disposal into the San Andres formation.

Rice Engineering & Operating, Inc. further deposes and states the following:

- A. That said well is located 660' FSL and 660' FEL of Section 16, Township 19 South, Range 38 Bast, Les County, New Mexico (see Exhibit "A").
- B. That said well was drilled as an unsuccessful deep test (TD 10,008') for possible productive formations with drilling complete on February 19, 1960 and plugging and abandonment completed on February 24, 1960.
- C. That said woll has 13-3/8" OD casing set at 292 feet and 8-5/8" OD casing set at 4176 feet with coment circulated to the surface on both strings (see Exhibit "B").

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Page 2 - Oil Conservation Commission - 1-17-77

- D. That said well will be completed as a disposal well in the San Andres formation by (1) cleaning out to top of the cement plug at 5500 feet (base of San Andres formation), (2) installing 4<sup>±</sup>/<sub>2</sub>" OD P. L. tubing to 4176 feet and (3) disposing of produced water in the open hole section from 4176 feet to 5500 feet.
- E. That the salt water to be injected is produced in the Hobbs Field.
- F. That the volume of salt water to be disposed shall be approximately 5500 barrels per day.

Therefore, Rice Engineering & Operating, Inc. requests that the Secretary of the New Mexico Oil Conservation Commission set a date for this application to be heard, and after said hearing, to grant this permit to dispose of salt water in the Hobbs SWD Well No. P-16.

Yours very truly, RICE ENGINEERING & OPERATING, INC. 570 0 L. B. Goodheart Division Manager

LBG/jp

Sec. 1

Attachments: Form C-108 Exhibit "A" Exhibit "B" Exhibit "C" Exhibit "D" Electrical Log

Form C-108 Revised 1-1-65

See.

PERATOR					ATER BY INJ				
Rice Engin	neering	& Operat:	ing.	Ino.		. Box	1142. Hot	bai k	New Mexico
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from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been re-ceived by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SEE RULE 701.

	APPLICA	TION TO DISPO	OSE OF SALT W	ATER BY INJE	CTION INT	O A PORQU	s format	ION Case 50
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LEA COUNTY, NEW MEXICO

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EXHIBIT	*U*		_

•	 DWN	AREA PLAT HOBBS SWD WELL NO. P-16	scale 1" = 4000	-
		Rice Engineering & Operating, Inc. Hobbs, New Mexico	DWG NO.	ļ

K & E CO. --- WICHITA --- HERCULENE 191543

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EXHIBIT "D"

## PRODUCTIVE FORMATIONS OF WELLS WITHIN A TWO-MILE RADIUS OF PROPOSED HOBBS SWD WELL P-16

COMPANY Amoco	LEASE South Hobbs	WELL NO.	FORMATION
and a second sec	(GSA) Unit	62	Grayburg-San Andres -466 to -582'
	h	63	Grayburg-San Andres -496 to -655'
н	91	64	Grayburg-San Andres -492 to -585'
99	**	65	Grayburg-San Andres -426 to -614
de la seconda 🗭	<b>11</b>	66	Grayburg-San Andres -414 to -624'
H	11	67	Grayburg-San Andres -384 to -596'
ti da se	H	68	Grayburg-San Andres -459 to -590'
<b></b>	11	69	Grayburg-San Andres -509 to -672'
Ħ	1	<b>7</b> 0	Grayburg-San Andres -454 to -534'
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The second secon	84	73	Grayburg-San Andres -512 to -667'
Ħ	n	74	Grayburg-San Andres -384 to -586'
	<b>11</b>	75	Grayburg-San Andres -439 to -618'
	11	76	Grayburg-San Andres -401 to +558'
	tt gang	77	Grayburg-San Andres -394 to -595'
łł	<b>PF</b> ( )	78	Grayburg-San Andres -467 to -660'
a n	<b>†1</b>	79	Grayburg-San Andres -507 to -585'
	<b>b</b> 1	80	Grayburg-San Andres -530 to -568'
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	gen 🙀 en en Santa A	83	Grayburg-San Andres -421 to -600'
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		87	Grayburg-San Andres -475 to -632'
		88	Grayburg-San Andres -396 Jo -580'
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	<b>\$1</b>	93	Grayburg-San Andres -480 to -588'
	<b>t</b>	94	Grayburg-San Andres
			4016 to 4177' Elev. not available
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	**	<del>96</del>	Grayburg-San Andres -465 to -593'
<b>1</b>	*	97	Grayburg-San Andres -575 to -612'
	14	<b>98</b>	Grayburg-San Andres -467 to -512'
W. Constraints of the second sec	H	99	Grayburg-San Andres -452 to -506' T/A
	H	100	Grayburg-San Andres -547 to -566'
an a	tt.	101	Grayburg-San Andres -411 to -574'

	COMPANY Amoco Contd.	LEASE South Hobbs	WELL NO.	FORMATION
		(GSA) Unit	102	Grayburg-San Andres -546 to -579'
	**	n	103	Grayburg-San Andres -409 to -584!
	<del>91</del>	ti	104	Grayburg-San Andres -569 to -598'
	11	M	105	Grayburg-San Andres -472 to -525'
	11	B	106	Grayburg-San Andres -477 to -563'
	91	ţi	107	Grayburg-San Andres -402 to -582'
	n	n	108	Grayburg-San Andres -473 to -517'
	<b>n</b>	#	109	Grayburg-San Andres -404 to -584'
	<b>n</b>	n	110	Grayburg-San Andres -482 to -634!
	<b>11</b>	*	111	Grayburg-San Andres -497 to -584'
	11	tt i a	34	Paddock -768 to -772' T/A
	<b>11</b>	H. T. Orcutt	1	Grayburg-San Andres -398 to -498'
	M	Terry et al	1	Grayburg-San Andres 4140 to 4194' Elev. not available
	Christman	J. Hughes	1	4011' P/A
	Cone	Will Terry	1	Grayburg-San Andrez -469 to -514' P/A
	Energy	Foster B	1	Drinkard -3607 to -4004'
	n ér e	Foster C	1	Drinkard -3399 to 3264'
	Felmont	Terry	1	-817' TD P/A
	R. Lowe	F. Selman	1	-3886 to -4032' P/A
ч. , <sup>т</sup>	Marathon	State Sec. 9	1	South Bowers-Seven Rivers +407 to +267'
	Martindala	Selman	1	Grayburg-San Andres 4202 to 4250' P/A
<b>K</b> .	Moran	Bjel	1	-670 to -702' Dry hole P/A
	Pan American	A.L.Foster A	1	Blinebry, Drinkard -2542 to -3358 to -2652' -3462' P/A
 	Rice Eng.	HODDE SWD	B-15	Lower San Andres -1063 to -1215'
	Shenandoah	W. Terry	1	Drinkard -3135 to -3288' P/A
	Shell	Terry	1	-640' TD Dry hole
-	Shelly	Mexico "u"	2	Grayburg-San Andres -469 to -554'
	Sohio	Bordages etal	1	-6689' Dry hole
	Stanolind	ferry Tract	1	4071 to 4185' Elev. not avail. P/A
	*	Wright	6	4275' TD Dry hole P/A
	Texaco	J. H. Moore	1	-480 to -528' P/A
	17	N. Corp. Ltd.	2	-501 to -583' P/A
	US Smelt.	Bordages	1	-569 to -618 dry, -3437 to -4279 dry P/1
	Topest	Yates	1	San Andres -872 to 876' P/A

-2-

RICE Engineering & Operating, Inc.

Post Office Box 1142

Telephone (505) 393-9174

HOB2S, NEW MEXICO 88240 January 17, 1977

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico 87501

> Re: Rule 701, Injection of Fluids into Reservoirs (Salt Water Disposal)

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#### Gentlemen:

Rice Engineering & Operating, Inc. as operator of the Hobbs Salt Vater Disposal System, Lea County, New Mexico, hereby respectfully applies for a hearing to be held before the New Maxico Oil Conservation Commission for the purpose of securing a permit under Rule 701 to recomplete the abandoned Nearburg & Ingram-Ohio State Vell No. 1, located in the SE/4 SE/4 Section 16, Township 19 South, Range 38 Bast, Les County, New Mexico, as the Hobbe SVD System Vell No. P-16, with salt water disposal into the San Andrees formation.

Rice Engineering & Operating, Inc. further deposes and states the following:

- A. That said well is located 660' FSL and 660' FEL of Section 16, Township 19 South, Range 38 Mast, Lea County, New Mexico (see Exhibit "A").
- B. That said well was arilled as an unsuccessful deep test (TD 10,008') for possible productive formations with dwilling complete on February 19, 1960 and plugging and abandonment completed on February 24, 1960.
- C. That said well has 13-3/8" OD casing set at 292 feet and 8-5/8" OD casing set at 4176 feet with coment circulated to the surface on both strings (see Exhibit "B").

Page 2 - Oil Conservation Commission - 1-17-77

- D. That said well will be completed as a disposal well in the San Andres formation by (1) cleaning out to top of the coment plug at 5500 feet (base of San Andres formation), (2) installing 42" OD P. L. tubing to 4176 feet and (5) disposing of produced water in the open hole section from 4176 feet to 5500 feet.
- E. That the salt water to be injected is produced in the Hobbs Field.
- F. That the volume of salt water to be disposed shall be approximately 5500 barrels per day.

Therefore, Rice Engineering & Operating, Inc. requests that the Secretary of the New Mexico Oil Conservation Commission set a date for this application to be heard, and after said hearing, to grant this permit to dispose of salt water in the Hebbs SVD Well No. P-16.

Yours very truly,

RICE ENGINEERING & OPERATING, INC.

Side, Briterian and I

- A See Bakely

L. B. Goodheart Division Manager

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Attachments:	Form C-108		
	Braibit "A"		
'	Enhibit "P"		
	Erhibit "C"		
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	NEW	MEXICO OIL C	ONSERVATION CO	NINTO A POROUS	FORMATION
APPLIC	NEW CATION TO DISPOSI	E OF SALT WAT	EK BY INJECTION		
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NOTE: Should waivers from the State Engineer, the surface owher, and all operators within one-half mile of the proposed injection well. NOTE: Should waivers from the State Engineer, the surface owher, and all operators within one-half mile of the proposed injection well. noi accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. If at the end of the 15-day waiting period no protest has been re-ceived by the Santa Fe office, the application will be processed. If a protest is received, the application will be set for hearing, if the applicant so requests. SHE RULE 701.





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# EXHIBIT "D"

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## PRODUCTIVE FORMATIONS OF WELLS WITHIN A TWO-MILE RADIUS OF PROPOSED HOBBS SWD WELL P-16

	COMPANY ABOGO	LEASE South	Норра	WELL NO.	FORMATION
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·		21		65	Grayburg-San Andres -426 to -614'
N		Ħ		66	Grayburg-San Andres -414 to -624'
	<b>N</b>	ti		67	Grayburg-San Andres ~384 to -596'
ļ	•	**		68	Grayburg-San Andres -459 to -590'
	<b>H</b>	Ħ		69	Grayburg-San Andres -509 to -672'
	<b>81</b>	<b>†</b> †		70	Grayburg-San Andres -454 to -534'
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		ti		74	Grayburg-San Andres -384 to -586'
	•	. 11		75	Grayburg-San Andres -439 to -618'
	•	N		76	Grayburg-San Andres -401 to -558'
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	<b>V</b>	N		95	Grayburg-San Andres -477 to -585'
	T .	Ħ		96	Grayburg-San Andres -465 to -593'
		· •		97	Grayburg-San Andres -575 to -612'
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COMPANY	LEASE	WELL NO.	FORMATION
Amoco Contd.	South Hobbs (GSA) Unit	102	Grayburg-San Andres -546 to -579
Ħ	(304) 0410	102	Grayburg-San Andres -409 to -584!
11	11	104	Grayburg-San Andres -569 to -598'
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N	11		Grayburg-San Andres -477 to -563'
*	n	107	Grayburg-San Andres -402 to -582'
*	n	108	Grayburg-San Andres -473 to -517'
*		109	Grayburg-San Andres -404 to -584'
	**	110	Grayburg-San Andres -482 to -634'
Ħ		111	Grayburg-San Andres -497 to -584'
11	11	34	Paddock -768 to -772' T/A
N	H. I. Orcutt	9	Grayburg-San Andres -398 to -498'
64 	Terry et al	1	Grayburg-San Andres 4140 to 4194' Elev. not available
Christman	J. Hughes	1	4011' P/A
Cone	Will Terry	1	Grayburg-San Andres -469 to -514' P/A
Energy	Foster B	1	Drinkard -3607 to -4004°
	Foster C	1	Drinkard -3999 to 3264'
Felmont	Terry	1	-817' TD P/A
R. Lowe	F. Selman	1	-3886 to -4031' P/A
 Marathon	State Sec. 9	1	South Bowers-Seven Rivers +407 to +267'
Martindale	Selman	1	Grayburg-San Andres 4202 to 4250' P/A
Moran	Bgal	4	-670 to -702' Dry hole P/A
Pan American	A.L.Foster A	i	Blinebry, Drinkard -2542 to -3358 to -2652' -3462' P/A
 Rice Eng.	Hobbs SWD	E-15	Lower San Andres -1063 to -1215'
 Shenandoah	W. Terry	1	Drinkard -3135 to -3288' P/A
Shell	Terry	1	-640' TD Dry hole
Skelly	Mexico "U"	2	Grayburg-San Andres -469 to -554'
Sobio	Bordages etal	1	-6689' Dry hole
Stanolind	Zerry Tract	1	4071 to 4185' Elev. not avail. P/A
•	Wright	6	4275' TD Dry hole P/A
Texaco	J. H. Moore	1	-480 to -528' P/A
**	N. Corp. Ltd.	2	-501 to -583 P/A
US Smelt.	Bordages	1	-569 to -618' dry, -3437 to -4279' dry P/J
Porest	Yates	1	San Andres -872 to 876' P/A
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-2-

## 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. 5860

Order No. R- 5384

APPLICATION OF RICE ENGINEERING & OPERATING, INC. FOR SALT WATER DISPOSAL, LFA COUNTY, NEW MEXICO.

## ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on February 16, 1977, at Santa Fe, New Mexico, before Examiner, <u>Richard L. Stamets</u>.

NOW, on this <u>day of February</u>, <u>1977</u>, 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, <u>Rice Engineering & Operating, Inc.</u>, is the owner and operator of the <u>Hobbs SWD Well No. P-16</u>, located in Unit <u>P</u> of Section <u>16</u>, Township <u>19</u> <u>South</u>, Range <u>38</u> <u>East</u>, NMPM, <u>Hobbs Field</u>, Lea County, New Mexico.

Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the <u>San Andres</u> formation, with injection into the <u>open hole</u> interval from approximately <u>4176</u> feet to <u>5500</u> feet.

(4) That the injection should be accomplished through <u>4/2</u> -inch plastic lined tubing installed in a packer <u>6.1' 6/a n Met</u> set at approximately \_\_\_\_\_feet; that the casing-tubing annulus should be filled with an inert fluid, and that • pressure gauge. carepproved look-detection device should be attached to the

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CASE NO.

the tubing and the annulus in order to determine leakage in the casing, tubing.

(4) That the injection well or system should be equipped with a pop-off value or acceptable substitute which will
limit the wellhead pressure on the injection well to no more \$35
than 700 psi.

(5) That the operator should notify the supervisor of the Hobbs district office of the Commission of the date and time of the installation of disposal equipment so that the same may be inspected.

(6) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface.

(7) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Rice Engineering & Operating, Inc., is hereby authorized to utilize its \_Hobbs SWD Well No. P-16 located in Unit P of Section 16, Township 19 South Range 38 East , NMPM, Hobbs Field Lea County, New Mexico, to dispose of produced salt San Andres water into the formation, injection to be accomplished through 4 -inch wher set at approximately tubing inst fcet. with injection into the open hole interval from approxit tely 4176 feet to 5500 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined that the cooling tubing annulus shall be filled with an inert for and for the cosing tubing tubing and for the filled with an inert for and for the pressure gauges shall be attached to the fannulus or the annulus shall be equipped with an approved leak detection device in order to determine leakage in the casing tubing. -3-CASE NO.

(2) That the injection well or system shall be equipped with a pop-off value or acceptable substitute which will limit the wellhead pressure on the injection well to no more than 400 psi.

(3) That the operator shall notify the supervisor of the <u>Hobbs</u> district office of the Commission of the **date** and time of the installation of disposal equipment so that the same may be inspected.

(4) That the operator shall immediately notify the supervisor of the Commission's <u>Hobbs</u> district office of the failure of the tubing, casing, or packer, in said well or the leakage of water from or around said well and shall take such steps as may be timely and necessary to correct such failure or leakage.

(5) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(6) 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.