CASE 4003: Application of MORRIS
R. ANTWEIL FOR SALT WATER DISPOSAL
LEA COUNTY, NEW MEXICO.

Anne Carle Carle

-idse Number

Application Transcripts.

Small Exhibits

dearnley-meier reporting service, inc.

LIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, (

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
December 19, 1968

IN THE MATTER OF:

Application of Morris R. Antweil) for salt water disposal, Lea County,; New Mexico.

Case No. 4003

BEFORE: DANIEL S. NUTTER

TRANSCRIPT OF HEARING



MR. NUTTER: We will call as the next case, Case 4003.

MR. HATCH: Application of Morris R. Antweil for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kelianin, Kellahin and Fox, Santa Fe, appearing for the applicant.

MR. NUTTER: We might call for additional appearances in this case, if there are any.

(Witness sworn.)

(Whereupon, Applicant's Exhibits 1 through 6 marked for identification.)

* * * * * * * *

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A Burton Veteto.
- Q Mr. Veteto, what business are you engaged in?
- A In the Oil Industry.
- Q Are you associated with Morris R. Antwell?
- A Yes.
- O The applicant in this case?
- A Yes.

- Q What is your position?
- A Geologist.
- Q Have you testified before the Oil Conservation

 Commission and made your qualifications a matter of record?
 - A Yes, I have.
- MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: Yes, they are.

- Q (by Mr. Kellahin) Mr. Veteto, are you familiar with the application of Morris R. Antweil in Case No. 4003?
 - A Yes, I am.
 - Q Briefly, what is proposed in this application?
- A Morris R. Antweil desires to convert the proposed well to a salt water disposal well.
- Q What is the well designation and what is its location, please?
- A The well is designated the Martha Forrest No. 1 well, located in the Jalmat Pool, under Unit L of Section 24, 25 South, 36 East.
- Q Referring to what has been marked as Exhibit No. 1 would you identify that exhibit, please?
- A This was prepared by our engineer, showing the Jalmat producing wells in blue and the disposal wells along

with our presentation in red.

- Q You say all the wells colored in blue are Jalmat wells, are they not?
 - A Yes, that's true.
- Q Now, the disposal well, the northernmost well, is the subject well in this hearing, is it not?
 - A That's right.
 - Q What are the other two wells?
- A The one to the south is the Continental disposal well, and south of the Continental well is the Ralph Lowe disposal well.
 - Q Do you know what interval they are disposing in?
- A Continental is disposing in the first 100 feet of the Seven Rivers Reef. The Ralph Lowe well is disposing in the Yates Formation.
- Q Now, referring to what has been marked as Exhibit No. 2, would you identify that exhibit?
- A That is Morris R. Antweil's application for the disposal well.
- Q Does that also show the ownership of the surface in this area?
 - A Yes.
 - Q Who owns the surface?

- A Mr. Fred B. Cooper, whose address is Jal, New Mexico.
- Q We will come back to that after a while. Does that contain all the required information on a normal application for salt water disposal?
 - A Yes, it does.
- Q Referring to what has been marked as Exhibit No. 3, would you identify that exhibit?
- A Exhibit No. 3 is a water analysis prepared by United Chemical Corporation, of the water.
- Q That is the produced water that will be disposed of in this well?
 - A Yes, sir.
 - Q What is the source of this water?
- A The source of the water is -- collected at the battery of which is the produced water.
- Q I understand, but what wells are producing and where are they located?
 - A This is from our No. 1 Federal Well.
- Q That is the water sample, but you will be disposing of water other than that in this disposal well, will you not?
 - A That's right.
 - Q What other wells will be involved in that?

A The other wells which will be involved are the No. 2 well of ours, Federal, and two wells which we are now in the process of purchasing, which are shown --

- Q On Exhibit No. 1?
- A Yes, it is the Ayres No. 2 Forrest and the No. 1.
- Q In other words, you are disposing of water then, from four wells, is this correct?
 - A That is correct.
- Q Are they all in the immediate vicinity of your disposal well?
 - A Yes.
 - Q What formation are those wells producing from?
 - A The Yates Formation.
 - Q That is in the Jalmat Pool, is it not?
 - A That is true.
- Q Referring to what has been marked as Exhibit No.
- 4, would you identify that exhibit?
- A No. 4 is a diagrammatic sketch of the proposed disposal well.
- Q Now, in connection with your application, did you file a copy of that exhibit?
 - A Yes.
 - Q Was the total depth incorrectly stated on that?

- A Yes, it was a typographical error. The correct total depth is 3330 feet rather than 70,330.
- Q But that has been corrected on your Exhibit No. 4 here?
 - A Yes.
- Q Does this exhibit depict the present condition of this well?
 - A Yes, sir, it does.
 - Q How will you complete it for salt water disposal?
- A We propose to re-enter this well, test the condition to receive the water, that is if it will make a disposal well at the intervals shown perforated and the open hole interval which is in the Yates Formation. If this is the case, we will run cement-lined tubing with a tension packer, fill the annulus with water and a gauge and dispose down the tubing.
- Q Now, will this type of a completion adequately protect all fresh water zones or producing horizons encountered in the well bore?
 - A Yes, it will.
- Q In your opinion, will the injection of water into the Yates as you propose, cause any damage or impairment to producing wells in the area?

- A No.
- Q Will it cause any loss of oil in any respect?
- A None whatsoever.
- Q Turning to what has been marked as Exhibit No. 5, will you identify that exhibit please?
- A Exhibit No. 5 is an ownership and location plat of the area.
- That's substantially the same as our Exhibit No. 1 other than the wells have not been shown, is that correct?
 - A That is correct.
- Q Turning to what has been marked as Exhibit No. 6, will you identify that exhibit, please?
- A This is a well which is a direct offset to our proposed disposal well, which is the operators No. 1 Roberta Well, which has subsequently been abandoned. The proposed well, there is no available log since it was drilled a number of years ago, by the Barnesville Company. This shows the interval which we believe to receive the injection of the disposed water.
- Q You would assume that that would correctly depict the formation in the subject well, would it not, in your opinion?
 - A I certainly would.

- Were Exhibits 1 through 6 prepared by you? Q
- By our engineer. A
- And he is ill, is that correct? Q
- That is correct. Ă
- Unable to attend the hearing? Q
- That's right.
- Have you examined the exhibits yourself? 0
- Yes. A
- In your opinion, do they correctly depict the Q information purported to be shown on them?
 - Yes, they do.
- Do they correctly reflect the conditions that Q exist?

MR. KELLAHIN: At this time, I offer in evidence A Exhibits 1 through 6.

MR. NUTTER: Antweil's Exhibits 1 through 6 will be admitted in evidence.

(Whereupon, Applicant's Exhibits 1 through 6 offered and admitted in evidence.)

MR. KELLAHIN: That completes our examination.

CROSS EXAMINATION

BY MR. NUTTER:

Mr. Veteto, turning to your Exhibit No. 1, would

you identify for me the four wells that initially will be taken care of by this disposal well?

- A Yes, the two wells in the east half of the southwest quarter of 24, Morris R. Antweil's No. 1 and No. 2 Federal.
 - Q That's the lease that's identified as Escarte?
- A Yes, on the plat, it is referred to on our schedule, I believe, as our Federal, Morris R. Antweil Federal Lease.
 - Q O. K.
 - A And the adjoining 80 acres with the No. 2 Forrest.
 - Q Which is the well south of the disposal well?
 - A Yes, that's true.
 - Q O. K.
- A And the well which will be southwest or west of the disposal well is the other well.
 - Q On that same '40?
 - A No, it's west of the disposal well ---
 - Q The blue well out there in Section 23?
- A Right, yes, sir, that will be in 23. The other wells are in 24 and then the one well in 23.
- Q Then you either have those at the present time, or you are acquiring them?
 - A That's correct.
 - Q Now, turning to your Exhibit No. 4, your schematic

diagram, is it correct that the disposal would be into the perforated interval from 3,049 to 3,090, from 3093 to 3110 and in the open hole interval from 3122 to the top of the plug at 3159?

- A That is correct.
- Q Now, I notice that you are going to use 2 and 7/8ths inch tubing set in a packer at 3030; will this tubing be plastic-coated?
 - A Cement-lined.
- Q Cement-lined tubing; and will the annulus be loaded with some sort of inhibited fluid?
 - A Yes, preferably treated water.
- Q And will it be equipped with a pressure gauge at the surface on the annulus?
 - A Yes, it will.

MR. NUTTER: Are there any other questions of Mr. Veteto?

MR. KELLAHIN: I'd like to ask one more.

REDIRECT EXAMINATION

BY MR. KELLAHIN:

Q Mr. Veteto, it is my understanding that the Commission has in its files in connection with this case, a letter from a land owner expressing opposition to this salt

water disposal well. Have you made any arrangement with the surface owner for the use of this well for salt water disposal?

A At the present time, we are negotiating surface damage with Mr. Fred Cooper.

Q Have any demands been made upon you by Mr. Cooper in connection with this?

A Yes, he is asking \$900.00 per year for the use of this well. We think that is a little high, and unreasonable. He is now asking \$750.00.

Q You are still in the process of negotiating with him, though, is this correct?

A Yes, we certainly are.

MR. KELLAHIN: That's all I had.

MR. NUTTER: Are there any other questions of Mr. Veteto? He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all I have.

MR. HATCH: I would like to read the letter that is spoken of into the record.

MR. NUTTER: Please do.

MR. HATCH: It's addressed to the New Mexico Oil Conservation Commission.

Morris R. Antweil has a lease in Section 24, Township 25
South, Range 36 East. Also, I own land that is under
another lease in the same section. Mr. Antweil has made
application to dispose of salt water into a well that isn't
on his lease. I hereby make protest that he not be allowed
to cross his lease line without settlement to me. He has
made no contact with me on damage. I understand that I do
have the right to protest and have a hearing. Fred B.
Cooper, Star Route, Jal, New Mexico."

MR. NUTTER: Was reply made to that letter, Mr. Hatch?

MR. HATCH: There is a copy of a letter that I sent to Mr. Cooper advising him that he does have a right to appear and protest the application of Mr. Antweil. He did not choose to appear at the hearing; the Commission will enter his letter in the record of the case.

MR. KELLAHIN: If the Examiner please, in regard to the letter, it is the position of the applicant that the Commission is without jurisdiction to consider the question of crossing lease lines or land ownership in connection with an

application for salt water disposal. I think the sole question presented to the Commission in an application of this nature is one where the prevention of waste and the protection of correlative rights. Now, if you come to the question of correlative rights as being an element of damages, certainly this Commission cannot sit in judgment on the amount of damages to be paid to the land owner under any conditions. The protestant in this case certainly has adequate remedy at law but not before this Commission. So it is our position that the protest should not be given any weight.

MR. NUTTER: Does anyone else have anything they wish to offer in Case 4003? We will take the case under advisement.

INDEX

WITNESS	PAGE	
BURTON VETETO		
Direct Examination	on by Mr. Kellahin	2
Cross Examination	9	
EXHIBITS	MARKED	OFFERED AND ADMITTED
Applicant's 1 through (6 6	9

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, ADA DEARNLEY, Court Reporter in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITNESS my hand this 20th day of November, 1968.

Ada Dearnley

i do hereby certify that the diverging is a complete neutral of the publishment of the pu

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Assics Bil Conservation Commission

LAND COMMISSIONER SUYTON B. HAYS MEMBER



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

December 23, 1968

Mr. Jason Kellahin Kellahin & Fox Attorneys at Law Post Office Box 1769 Santa Pe, New Mexico Re: Case No. 4003
Order No. R-3641
Applicant:
Morris R. Antweil

Dear Sir:

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

Very truly yours,

A. L. PORTER, Jr. Secretary-Director

ALP/1r					
Carbon copy	of drd	er also s	ent to:		
Hobbs OCC_X					
Artesia OCC_					
Aztec OCC					
Other	State	Engineer	Office		

DEFORE 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 COMSIDERING:

> CASE No. 4003 Order No. R-3641

APPLICATION OF MORRIS R. ANTWEIL FOR SALT WATER DISPOSAL, LEA COUNTY, MEN MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on December 19, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 23rd day of December, 1968, 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, Morris R. Antweil, is the owner and operator of the Martha Forrest Well No. 1, located in Unit L of Section 24, Township 25 South, Range 36 East, NMPM, Jalmat Pool, Lea County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Yates and Seven Rivers formations, with injection into the perforated and open-hole interval from approximately 3049 feet to 3159 feet.
- (4) That the injection should be accomplished through 2 7/8-inch cement-lined tubing installed in a packer set at approximately 3030 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should

CASE No. 4003 Order No. R-3641

be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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, Morris R. Antweil, is hereby authorized to utilize his Martha Porrest Well No. 1, located in Unit L of Section 24, Township 25 South, Range 36 East, NMPM, Jalmat Pool, Lea County, New Mexico, to dispose of produced salt water into the Yates and Seven Rivers formations, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 3030 feet, with injection into the perforated and open-hole interval from approximately 3049 feet to 3159 feet;

PROVIDED HOWEVER, that the tubing shall be cement-lined; that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus at the surface in order to determine leakage in the casing, tubing, or packer.

- (2) That the applicant shall submit monthly reports of his disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (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 OID CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

GAYTON B. HAVS, Member

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

OIL CONSERVATION COMMISSION P. O. BOX 2088 SANTA FE. NEW MEXICO 87501

December 10, 1968

Mr. Fred B. Cooper Star Route Jal, New Mexico

Re: Case 4003
Application of Morris R.
Antweil for salt water
disposal, Lea County,
New Mexico

Dear Mr. Cooper:

I am enclosing the docket of cases to be heard before an examiner on December 19, 1968.

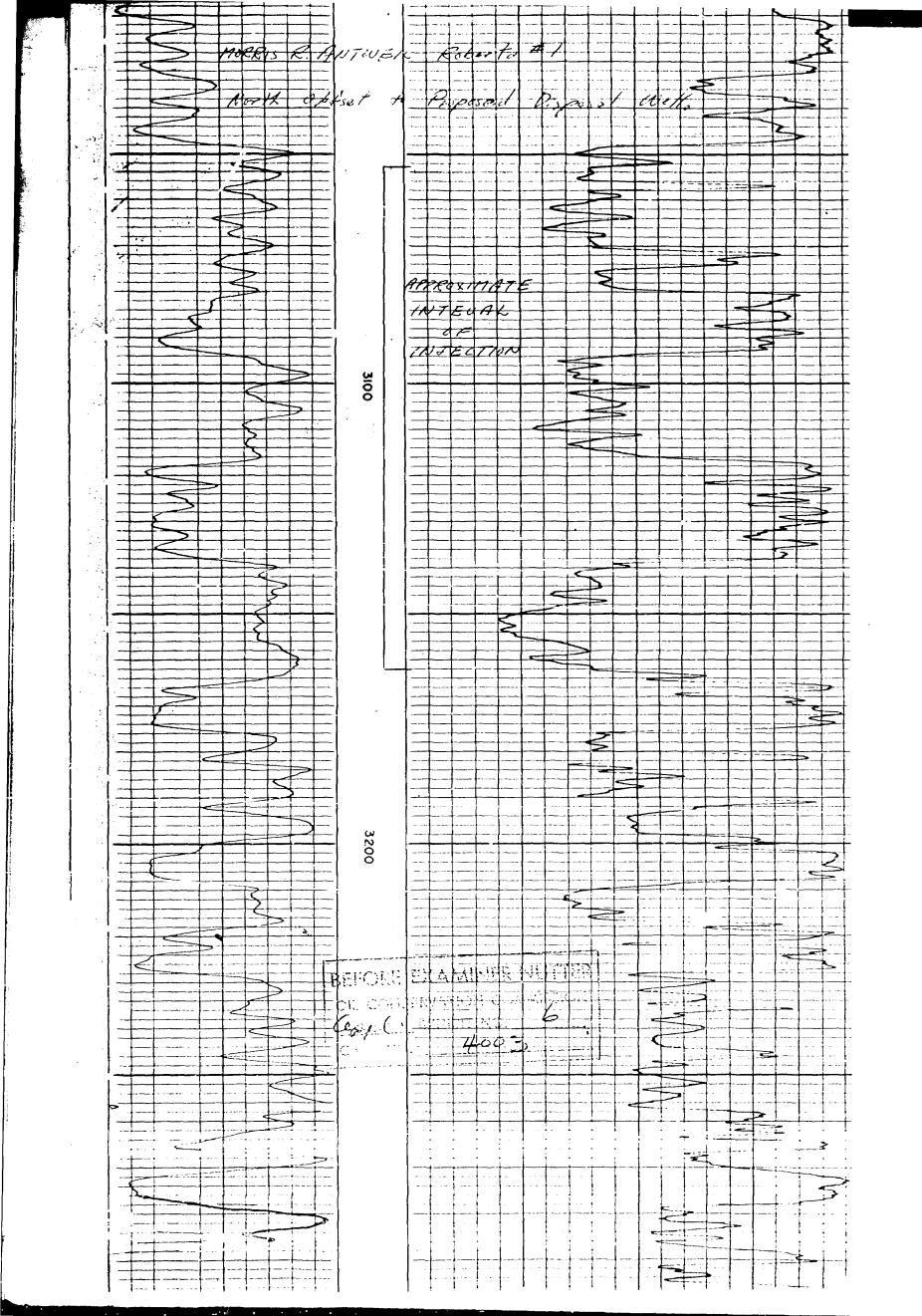
You have a right to appear and protest the application of Mr. Antweil. If you do not choose to appear at the hearing, the Commission will enter your letter of December 7, 1968, into the record of the case.

Very truly yours,

GEORGE M. HATCH Attorney

GMH/esr Enclosure

Mow Mexico Fel Convergation Com. LCcc 1, 1968 an land Querry of leated stand where Micari Sin Morris R. auticul hora love in Sec. 24 7255. R36E allow I own land that in under a moulting loose in the same sur Mr antwell how mode opplication to laspore of Sui Salt water into a well that went on his line I have by make protest that he med be Warred to Cross for Leave line with out sittlement to me, he has made no Contoil with me a danage, I understand I do how the right to protest and have a Thomps Fred 13. 63, Stor 18t Mr. anticult opplication was Noted &Cu 2,1868



Docket No. 40-68

DOCKET: EXAMINER HEARING - THURSDAY - DECEMBER 19, 1968

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

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

- CASE 4000: Application of Coastal States Gas Producing Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware Sand formation in the perforated interval from 5051 feet to 5055 feet in its Conoco-Federal Well No. 2 located in Unit B of Section 15, Township 26 South, Range 33 East, Salado Draw-Delaware Pocl, Lea County, New Mexico.
- CASE 4001: Application of Tamarack Petroleum Company, Inc. for salt water disposal, Lea County, New Mexico. Applican', in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 4862 feet to 4892 feet in its Union State Well No. 2, located in Unit K of Section 15, Township 19 South, Range 35 East, Pearl-Queen Pool, Lea County, New Mexico.
- CASE 4002: Application of Marathon Oil Company for a unit agreement, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Dallas Ranch Unit Area comprising 8,929 acres, more or less, of State lands in Township 9 South, Ranges 26 and 27 East, Chaves County, New Marico.

CASE 3968: (Continued and Readvertised)

Application of Texaco, Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from approximately 12,400 feet to 12,550 feet in its U. D. Sawyer Well No. 4 located in Unit O of Section 34, Township 9 South, Range 36 East, Crossroads-Devonian Pool, Lea County, New Mexico.

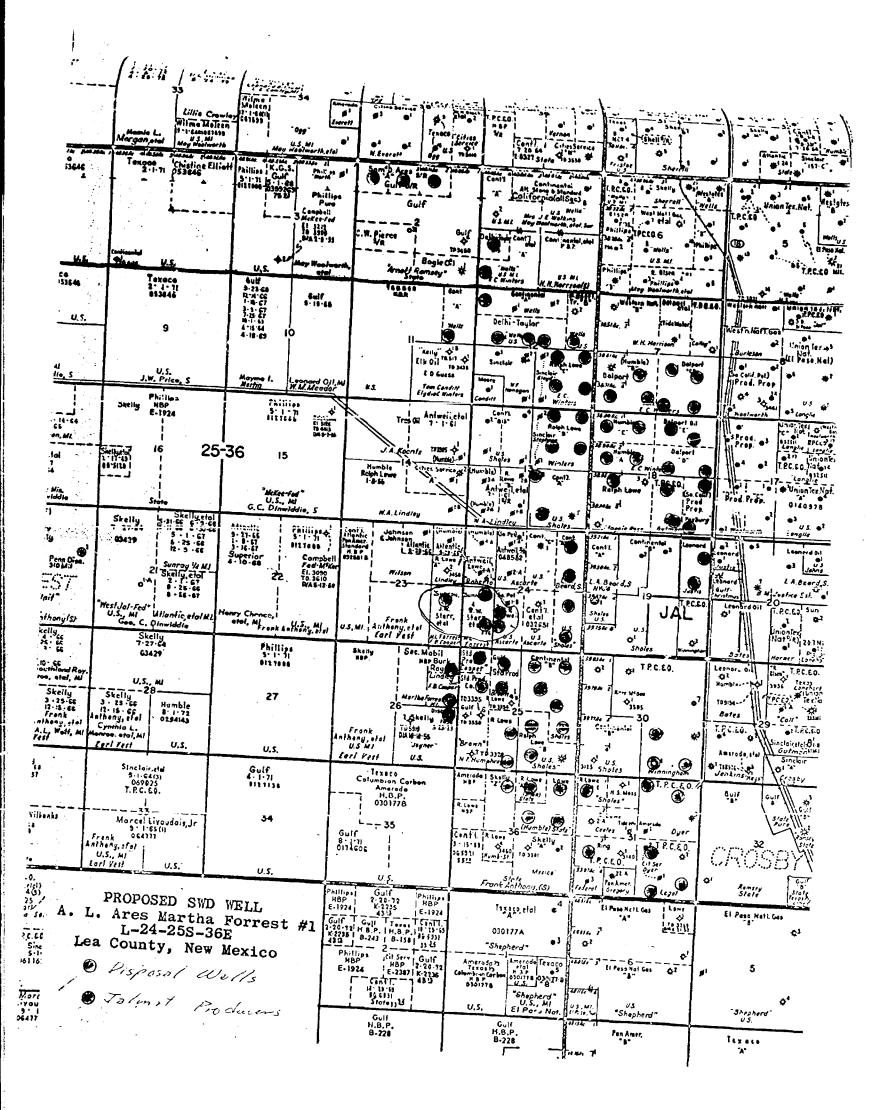
December 19, 1968, Examiner Rearing Docket No. 40-68

CASE 4003:

Application of Morris R. Antweil for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Tates-Seven Rivers formation in the perforated and open-hole interval from 3049 feet to 3159 feet in his Martha Formest Well No. 1 located in Unit L of Section 24, Township 25 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

CASE 4004:

Application of Atlantic-Richfield Company for the amendment of Order No. R-3507, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3507 to permit the disposal of produced salt water into the Lower Queen formation in the interval from 5160 feet to 5380 feet, as well as the previously authorized interval from 4820 feet to 4830 feet in the Upper Queen formation, in its State BH Well No. 1, located in Unit D of Section 13, Township 19 South, Range 34 East, Quail-Queen Pool, Lea County, New Mexico.



Form C-108 Revised 1-1-65

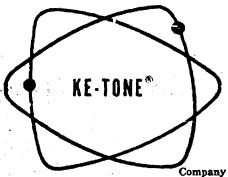
NEW MEXICO OIL CONSERVATION COMMISSION

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

PERATOR		4		Box	2010	He	obbs, New	Mexico
CASE HAME	orris R.	Antwell	WELL NO.	FIELD		44~		COUNTY
M MOCATION	artha For	rest	1	Jalm	at		l	Lea
	URIT LETTER	L .we	LL IS LOCATED	2310	SM THE	outh	99	0
West	LINE, SECTION	24 100		RANGE	36K	Lea Co	ounty. Ne	w Mexico
Nesv	tine, section		THE PARTY OF THE P	G AND TUBING DAT		M.		
DAIES PERVEU	P STRING	912%	BETTING DEPTH	BACKS CEMEN	7	op of eams	NT TOP	PETERMINED DY
HYERMEDIATE		12 1/2"	5001	485		Circ.	Calc	ulated
		9 5/8"	29301	400		Circ.	Calc	ulated
one synthe		7"	3122	50		27251	Calc	culated
USING		2 7/8"	3030'	Guiberson			30¹	
	to INJECTION FORM	ATION		TOP OF FORM	AT 16H 049 1		3159	
HIT HOLTSTON .	OUGH TUBING, CABI	en Rivers	PERFORATION	HS OR OPEN HOLEP PR	OPOSED INTE		СТІОН	
Ti	ibing	IF ANSWER IS	BOT NO, FOR WHAT PURP	DE WAS WELL ORIGIN		049' - 3		BEEN PERFORATED IN IN THE PROPOSED INJECTION
No)		Jalmat Pro	Oducer off or squeeze each	 		TION ZONE?	Мо
EPTH OF BOTTO RESH WATER 20	HE IN THIS AREA		DEPTH OF BOTTOM			DEPTH OF TO	P OF NEXT LOWER ONE 'N THIS AREA	None
MTICIPATED DAI NJECTION VOLUM	CY MINIMUM	1100'	OPEN OR CL	Nated TANE SAREM	ONE	N TO BE BY ERA	VITY OR APPR	OX. PRESSURE (PBI)
86LS.)	2500 b	/ d 3500 b	/d C1	osed		Gravity	1	
RALIZED TO SUC TOCK, INRIGATI	OK, OR OTHER GENER	LLOWING WATERS AR BE UNFIT FOR DOMES RAL USE -	itie,	Yes	SAL TONE	Yes	1	Yes
AME AND ADDRE	35 OF SURFACE OWN	ER (OR LESSEE, IF	STATE ON PEDERAL L		<u> </u>		<u> </u>	
Fre	ed B. Coop	OPERATORS WITHIN	Ja:	l. New Mexi	.co			
Bu	rk Royalt	v Co.	800 0	il & Gas Bl	dg.	Wichita	Falls,	Tex. 76301
•			n - 7	60		Uobba	Now York	co 88240
St	andard Pro	oauction C	o. Box 7			nouns,	HEM WEYT	00230
Co	ntinental	Oil Co.	Box 4	60		Hobbs,	New Mexi	co 88249
٠ ر			•				-VALLE!	ED KHATES
	-				B	-FORE 1	C/\ /^ V\ ^	قىملىكىدۇ. ئۇيۇدىۋى يولۇرى. ئايدىت دۇرۇرى
AVE COPIES OF	THIS APPLICATION	SEEN TSURFACE OW	NER	EACH OPERAT		IL CONST	THE NEW MEXIC	COMMISSION
ENT TO EACH O	THIS APPLICATION F THE FOLLOWING!		Yes '	OF THIS WELL		Tos	EXHISIT N	10.00
RE THE FOLLOW	ING ITEMS ATTACHE	ED TO PLAT OF ARE	.A	ELECTRICAL	100	ASE NO.	DIAGRAMMATIC	SKETCH OF WELL
<u> </u>	·	i	Yes		lvailai		1 Y e	
	I hereby o	certify that the in	formation above i	s true and complete	to the bea	it of my know	ledge and belie	ef.
Ch	Will	cons		Agent			2 De	cember 196
	(Signature)			(Title)				(Date)

NOTE: Should waivers 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 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 his 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. SKE NULE 701.

TABLE 1



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company	Morris R. Antweil		
Field	Jaimat - Seven Rivers		
Lease	Federal	Sampling Date	6/4/68

WATER ANALYSIS

WATER ANALYSIS		
IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	25.15	504
Magnesium (Mg++)	20.97	255
Sodium (Na+) (col.)	141.57	3255
<u>(ron</u>		0
		···
Blearbonate (HCO3)	23.40	1427
Carbonate (CO3-) BETORE EXAMINED NUTTER	NOT	FOUND
Hydroxide (OH-)	NOT	FOUND
Sulphate (SO ₄ -)	31.75	1525
Chloride (Cl-) Chloride (Cl-)	132.54	4700
G: 40. 4003		
7,3 ^{pH c} @ 68 F		:
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	46,12	2306
Carbonate Hardness, as CaCO ₃ (temporary)	23,40	
Non-Carbonate Hardness as CaCO ₃ (permanent)	22,72	1136
Alkalinity as CaCO ₃	23,40	1170
Specific Gravity c 68' F	1.005	
	j	

^{*} mg/l = milligrams per Liter

Water Sample taken from
Morris R. Antweil Lease
E/2 SW/4 Sec. 24-258-36E
Producing from the Jalmat Yates - Seven Rivers.

unaununununun Makes Water Work unanununununununun

^{*} me/l = milliequivalents per Liter

A. L. ARES MARTHA FORREST #1 L-24-25S-36E Lea County, New Mexico

	6	Injection Sloo' CHF	
		12½" @ 500' 485 sx - Circ.	BEFORE EXAMINER NUTTER OIL CONSERVATION COMMISSION CASE NO. 4003
		9 5/8" @ 2930' 400 sx - Circ.	ned
		2 7/8" Tubing to 3030'.	Internal Open to Injection Perfs 3049' - 3090' & 3093' - 3110' Open Hole - 3122' - 3159'
X		Perforations 3049' - 3090' 3093' - 3110'	A-5
		7" @ 3122' 50 sx - top cmt. Plug back 3159'	2725' (calc)
TD	7530 ' 3330	w/gravel & hydrom Plug back 3324' w/625# lead wool	lite

S3 Lillie Crowley Mines Miles Mensie L. Margan and Magnineth	Gilme 1 Gilme	Crima barrine g) [custor relies [custor rel	H B P. Vernan	nera Shail in	State Carlland State Sta
in fame i and date sune stand	Phillips Autoral Phillips at Phillips Autoral Phillips Autoral Phillips Autoral Phillips Autoral Phillips Pure Compbell	Same D. Ares statute Placed / Conf. D/R Gulf D/R	The second secon	(ECCO. 4 & Saetly Sacrification of Salitation of Salitatio	Which Tex. Not.
U.S. Continuely Trans U.S.	MAT-9-39 MAT-9-39 Solve Wood worth, and a	C.W. Pierce ON Gulf VA 19340 Bogie Cft Arnot/Remosey* *	Continue Cont Continue Cont Continue Cont Continue Cont Continue	Paul Bolly 15 Act Phillips 9, Shen at Phillips 9, Shen at Phillips 95 3 Margorth stal	T.R.C.E.D. W.
Co Taxaco 2 1-71 essaco 2 1-71	3-23-45 f2:HCG 5-18-68 1-9-C7 1-3-C7 1-3-C7 H1-1-31 4-16-48 10-48	'A' Wells	Ochi-Taylor wells 12 12 13 14 15 15 15 15 15 15 15 15 15	Milde of Studenter State of St	Westa Nott Gas Westa Nott Gas Wolf Passe Not Of Gas Wolf Passe Not)
MI U.S. J.W. Price, S Phillips	Maymo I. Leonard OJI, M. Mestin W. M. Mestor	Elk Oil 19 2231 AL Elk Oil 19 2231 AL Elk Oil 19 2231 E. B Guesa Tam Conditt Elydroc Winters	Moore Wa Sinchor Contr. of gl winders	Dolport James 2 sml 2 c mintery Bases 1 Humble Bolport Oil	Sa Calif, Part Prod. Pray Prod. Pray Prod. Pray Prod. Pray Prod. Pray Prod. Pray Pray
Stelly 469 E-1924	36 15	Tres Gl 7 - (- C) V. A. Koontz 17995 - (Numble 1 Cities Survice of 2 Cities Survive o	Rote Lews Sincher B Signature Signature Styles B Sholes B Sholes B	A code ? Dolport A convenient B R.C. RO.	SProd 3 confer temper t
Min. Min. State Skelly 5-31-66 6-3-66	Metter-fad O.S., Mi G.C. Dinwiddie, 5 Atlantic Phillips	P.A. Lindley Contl. Johnson at [Pumble] Alignitic Eubhasan	Jumbio Ra Solomo	Raigh Lawe Sacal Prod. Raigh Sa	ol Washarth Langlie
Pena Oce. 310 Mil. 2 1 67 67 67 67 67 67 67 67 67 67 67 67 67	5-11-65 1-2-57 3-16-67 Superior Compbell 4-10-68 Compbell Fed-Miker El. 2000 12. 343-12-66	Trained Alamic Allamic Alamic Alamic Nap Bostal Base Alamic Alami	Anthreis Sq. Asserte Seconds.	24 DEJEAL 7	Suprise (A. Seerd (Suprise SIA) Leonord (I P.C.E.) Sun
init" "Westdal-Fed" U.S., MI Utlantic stal M. Geo. C. Pinwiddie Skelly	Honey Chroca, I U.S., All oref, M. Frank Anthony, etcl. Phillips 5-1-11	V 8 (00)01	Affive I etc. Start Start	19856 4 U.S. Sholes Transport	Bares Moraer Learner of Bares T.P.C.E.C.
Skelly Skelly Numble	60 mii 27	Meribeformes & 26 1. Shally salt 10519 a 25-33	Std a cutt Continental action of the cutt of the cutton of the cut	7 Kern Mrsee 7 53955 7 7 7 7 7 7 7 7 7	109:94- 17 29 -17.6.1 T.PC.EO. 29 -17.6.1 Vincloigate 8
Anthony, alel Cynthio L. A.L. Welf, MI Ferl Fell Sincloi: etal	U.S. Gulf 4-1-71	Anthany, stel UNAV-18-55 U.S.M.I. Ungner U.S.M.I. U.S. Fori Pesi U.S. - Texacts Columbion Corbon	Brown! AT 70 5128 - U.S. ** Snotes Amerodo t Skelly & Love Love ** ** ** ** ** ** ** ** **	Shores Winnington Thores Winnington T.P.C.E.O.	Americal State Sincorr
757 C698035 T.P.C.60. 	34	Amerade H.D.P. 0301778 35 Guif 8 1:71	R. Lone Skelly	Right Street Str	32 C/YOSB
Frenk Octiff Anthony, stell U.S., MI Fort Vest U.S.	U.S.	U.S. Phillips Gulf (Phillips HBP 2:26-72 HBP	Fronk Anthony, (S) Issays, etcl	JJJJ A Pankmar, J Lagar	Q1 Remoy 500 State
PROPOSED S A. L. Ares Mart L-24-25S Lea County, N	ha Forrest #1 -36E	E-1924 K-2235 E-1924 Gulf Gelf T	030177A "Shapherd"	inna i	ئي 5 او
5-16 5-16: 5. Thare Livou		E-1924 [-2327] K-7326 [### ##################################	[α s wa	Shepherd' "Shepherd' "S" TEX BEO "A"
06417		1	· -	game 7	1

Morris B. Antweil

OIL OPERATOR

P.O.BOX 2010

HOBBS, NEW MEXICO

December 2, 1968

Case 4603

New Mexico Oil Conservation Commission Box 2088 Santa Fe, New Mexico 87501

Attn: Mr. D. S. Nutter, Cheif Engineer

Gentlemen:

Attached is a form C-108, Application for Approval of a Salt Water Disposal Well, on a well presently operated by A.L. Ares, Box 75, Santa Fe, New Mexico. Morris R. Antweil has reached an agreement to purchase the Martha Forrest lease from Mr. Ares effective 1 January 1969.

We request the application for a salt water disposal well be considered in our name to be effective 1 January 1969. Please notify us if there is anything further required with this application.

Yours very truly,

MORRIS R. ANTWEIL

mWilliams

R. M. Williams

RMW/cs

DOCKET MARLED

Done 13-5-68

Form C-108 Revised 1-1-65

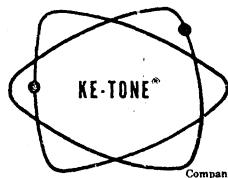
NEW MEXICO OIL CONSERVATION COMMISSION

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

Morris R.	Antweil		B	sox 2010	0 1	Hobbs	, New Me	xico
Martha For		WELL NO.	J	almat			COUNTY	ea
LOCATION								
UNIT LETTER	L, ; we	LL IS LOCATED	2310	EET FROM THE	South	LINE AND_	990	_ FEET FROM THE
West LINE, SECTION	24 TOW	NSHIP 25S	RANGE	36E		Count	y, New M	exico
		CASING	AND TUBIN	GDATA				·
NAME OF STRING	SIZE	SETTING DEPTH	SACKS	CEMENT	TOP OF CE	ENT	TOP DETE	RMINED BY
SURFACE CASING	į		İ		Ì			
	12 1/2"	5001	485	•	Circ.	1	Calcula	.ted
INTERMEDIATE								
,	9 5/8"	2930'	400)	Circ.	1	Calcula	ted
LONG STRING	3 2/7	2930	1	′- 	0110.			
		ar on t	-		2725'	1	Calcula	tod
TUBING	7"	3122'	50		TUBING PACKER		Carcura	iteu
TOBING	j		ł					
	2 7/8"	3030'	Guiber	son Te	nsion @ 3	030'		
NAME OF PROPOSED INJECTION FORMA	rion		0 407	FORMATION		BOTTON	OF FORMATION	
Vates - Sev	en Rivers	Reef	1	3049	t	1	3159'	
Yates - Sev	GOR ANNULUS?	PERFORATION	S OR OPEN HOL		INTERVAL(S) OF IN	JECTION		······································
Muhina		Bot	h	1	3049' -	3150	1	
Tubing 15 THIS A NEW WELL DRILLED FUN DISPOSAL?	IT ANSWER IS	ND. FOR WHAT PURPO		ORIGINALLY DE				ERFORATED IN ANY
DISPOSAL?						20NE 0	クルチラ	
NO LIST ALL SUCH PERFORATED INTERVAL		Jalmat Pro		e exeu			No	<u> </u>
CIST ACE SUCH PERFORMIED INTERNAL	S AND SACKS OF CE	MENT USED TO SEAL	OFF OR SQUEE	LEEACH				
	~							
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA		DEPTH OF BOTTOM O	F NEXT HIGHER THIS AREA		DEPTH OF T	ZONE IN T	T LOWER HIS AREA	-
	1100'			None	l l			None
ANTICIPATED DAILY MINIMUM	TMAXIMUM	OPEN OR CLOS	SED TYPE SYST	EM IS IN	ECTION TO BE BY G	RAVITY OR	APPROX. PRE	SSURE (PS!)
2500 b/	d 3500 b	/d C10	sed	1	Gravit			
ANSWER YES OR NO WHETHER THE FOL	LOWING WATERS ARE	MIN- VATES	R TO BE DISPOS	ED OF NATUE	RAL WATER IN DISPO		ATER ANALYSES A	TTACHED?
ERALIZED TO SUCH A DEGREE AS TO B STOCK, IRRIGATION, OR OTHER GENERA	E UNFIT FOR DOMEST LL USE —	i		' SAL 2		l		
NAME AND ADDRESS OF SURFACE OWN			Yes		Yes		Yes	
NAME AND ADDRESS OF SURFACE OWN	in ton Lessee, if s	TATE OF PEDERAL EX	ND)					
Fred B. Coop	er	Ja1	, New 1	lexico				
1 'ST NAMES AND ADDRESSES OF ALL	PERATORS WITHIN O	NE-HALF () MILE OF	F THIS INJECT!	ON WELL				
Burk Royalty	Co.	800 Oi	1 & Gas	Bldg.	Wichit	a Fal	ls, Tex.	76301
Sura Rojuroj								
Otomboud Dwo	dustion C	n Poy 76	:2		Mobbe	Now	Mexico 8	18240
Standard Pro	auction Co	o, box ro			HODDS,	TICM	MEATCO C	00010
_		- 40			11			0040
Continental	Oil Co.	Box 46	50		Hobbs,	New	Mexico 8	88249
HAVE COPIES OF THIS APPLICATION BE	EN SURFACE OWN	ER			HIN ONE-HALF MILE	THE NE	W MEX. TO STATE	ENGINEER
SENT TO EACH OF THE FOLLOWING?	1	V ~ ~) OF TH	IS WELL	Voc	1		
ARE THE FOLLOWING ITEMS ATTACHES	TO PLAT OF AREA	Yes		RICAL LOG	Yes		MMATIC SKETCH	05 W511
THIS APPLICATION (SEE RULE 701-B)	PERFORMER		i			I		V. 11226
		Yes	Noi	ne Avai	lable		Yes	
I hereby ce	ttify that the info	ormation above is	true and con	nplete to the	e best of my kno	wledge a	nd belief.	
· · · · · · · · · · · · · · · · · ·				•	•			

En Williams	Agent	2 December 1968
(Signature)	(Title)	(Date)

NOTE: Should waivers 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 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 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.



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company	Morris R. Antweil		
Field	Jalmat - Seven River	<u> </u>	
Leuse	Federal	Sampling Date	6/4/68
Type of Sample			

WATER ANALYSIS

IONIC FORM	me/i *	mg/l *
Calcium (Ca++)	25.15	504
Magnesium (Mg++)	20,97	255
Sodium (Na+) (col.)	141.57	3255
Iron		0
Bicarbonate (HCO ₃)	23.40	1427
Carbonate (CO3 -)	NOT	FOUND
Hydroxide (OH-)	NOI	FOUND
Sulphate (SO ₄ -)	31.75	1525
Chloride (Cl-)	132.54	4700
*.		
7.3 ^{pH c} (3) 68 ° F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	46.12	2306
Carbonate Hardness, as CaCO ₃ (temporary)	23.40	1170
Non-Carbonate Hardness as CaCO ₃ (permanent)	22.72	1136
Alkalinity as CaCO ₃	23.40	1170
Specific Gravity c 68° F	1.005	

^{*} mg/l = milligrams per Liter

Chal 4003

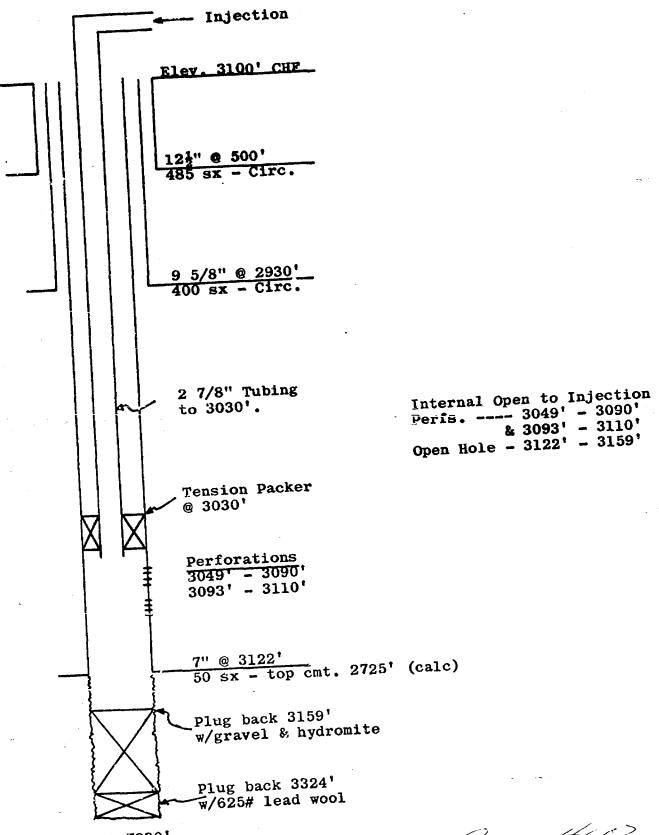
Water Sample taken from Morris R. Antweil Lease

E/2 SW/4 Sec. 24-25S-36E Producing from the Jalmat Yates - Seven Rivers.

ummanamanaman Makes Water Work ummanamanaman

^{*} me/l = milliequivalents per Liter

A. L. ARES MARTHA FORREST #1 L-24-25S-36E Lea County, New Mexico



TD 7330'

Care HCC3

1	(11801 12500 h.)	1	:	·		
	33	WIE - 34	Cities Service Service City Cit	eccol of a		- 10 - 1 Gent - 1
· [Lillie Crowley Wilmo Motern	597533 'Ogo" EneroH	1 1 7 1	N. B.P. Vernan	ner a Shail Die	1 7 16 CA THE MANAGE
	Mamie La 4.1-ELEIGETETS W.S. MI Mnrgdh,etel May Nationath	May Washwerth, etal	Personal Control Toland	Cont Citias Service 1:28 64 Citias Service 1:28 64 Citias 1:28 64 Citias Citi	region Shorth	of MITAL TISTIC
12 100 MA /	Tengos Chistins Ellistt 2:1:71 053846	lating K.G.S. Phillips #1	Sameb Area stands France / Gulf D/R	Cont'l Continental as	T.P.C.GR. 1 6 - Shelly 3 Merby No.	Westgles
""		Phillips K.G.S. Phillips pl S-1-31 S-1-ca 0121000-50392753 Phillips 75 9 Phillips	Gulf	A Californialalisas a	Mile West Note See	i reisi
7		3 McKee-Fed	C.W. Pierce Gulf	1/2 ALL May Heatmarth, etcl. Ser	seem 3 Proces 6	5 a App Net
; .		10 500 MAT-9-59		A H B P	US MI	TRC.ED MIL
U.S.	(salizate) • Of sale U.S.	41/ May Woolworth, U.S. etcl	Bogletti Arnoti Romsey* #	# ## # # # # # # # # # # # # # # # # #	Phillips 2. Olses -a: & Ophillips 2. a5 'S' May Hoolmarth stat	Mary and Mar
CO 153646	Texace 2* 1-7/ 853846	Sulf 3-23-60 Gulf	TORRES CONT.	Canjmentel 10. Eggit.	Chauspine mer perboti 1285TO	Western mit gi Union tax. Net. gitPCLE git City. Jun
	es3646	12: N · CG	. Wells	Delhi-Taylor	M.H. Morrison College	Westin Nattigues 64 pp 62 Union Texas
<u> </u>	9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	"MANY" CAN	034 US. 01 01 01 05 05 05 05 05 05 05 05 05 05 05 05 05	SERIAL (Humble) Delpark	(Suriesan Bitt Fese Hel)
1			Elk Dil To Jest	Sinclair Sinclair Sinclair Since	Balloori de l	fiprod. Prop
41 110, 5	U.S. J.W. Price, S	Mayme I. Leonard OII.M Mertia W.W. Meador	U.S. Tom Canditt ElydiaC Winters	Conditi #1 E.C. Winters	sin1 2 E.C. winters	S Congle
	Phillips Skelly HBP E-1924	Phillips 5-1-71 Reduction 117000 Reduction	Tres (6) 7 - 1 - 61	Conft of 2 of	Humble 2 Delport Oil	SPros. 3 93233 RPLEO S Longite Langue
- 14 · 64		11 170 0 6 11 1/20 19 46/5 pa 8-7-46	J.A. Kooniz tross o	Sinclair	Jack Inumble Delport	TEC.CO. Halas
en,Mi.	Stellight 16 25	-36 IS	Humble Cifres Service and	Shiples # # Winters	MANA 1 30 T.RC.EQ. 4	Longite Aunion Tex Not.
	ionii)	"McKee-fad"	Soigh Love	aniwelledal	Relph Lawe " (Sa. Celif) Pred Pres.	9744.7749. Q:48818
Min. viddie	State State	U.S., All G.C. Dinwiddie, S	W.R. Lindley	Walindley Sholes	d' Maggie Rose dulmon 4	el Washnarm Langile
?}	Skelly 5.31-66 6-3-66 7- 27-64 5-11-66 6-30-66 5-11-67	Atlantic Chillips of 9-27-56 5-1-71	Cont'l Johnson pt (Numble) trionic g. Johnson stientic kilantic, strandord a 13-26 3-13-16	(Humble) Go Pellal Cont. Cant. 44 Author) 56 Author) 56 O48582	Conf. Cantinental Conses	Leanerd Bil
.lg ⊗ l	03429 8 - 25 - 66 12 - 5 - 66	Superior Compbell	8325618 R. LONG	LAME AND MEAN	Misse T	Thorse 1 LA. Bourd S.
Penn Disa. 310 Mil	Sunray 1/4 MJ 21 Skelly, etcl	22 TO 3610 DVA 6-12-84	Wilson Visso Lindley 23 Sunray,	Roberto Aschrite Beerd'S	19 T,ecso.	Leonard Gil C pc Ea Sun
toid"	6 - 26 - 67		J.W. Starr,	Sterr. 1 1037651 U.S.	Shiles U.S. 19184 6 U.S.	Januares Nat (k) 20.1 Ni
other (S)	"WestJot-Fed" U.S., M! Utlantic etal M! Goo. C. Qinwiddia	Henry Chrice, 1 stel, Mi Frenk Astheny, et el	U.S.MI. Anthony.etal LETerrest	ETE US US OF Sholes	Sholes Kinngton	Sales Names Hare's
keliy 4 - 66 76 - 66 3 - 66	Skelly 7-27-64 03429	Phillips 3-1-31	Skarty Sec. Mobil	Fred. Stapped Continental	03.09 T €C.50.	Leoner Oil Clark T.P.C.CO.
15 66 outhland Ray.		6127368	Lindley		35 WAr 2 Kerr Milana 7	109:54-1 Texto
Skelly	U,S., AU - 28 - Skeliy 3 · 25 · 66 Humble	27	26 the force	a will replace	3074.	T.P.C.EO. 29-27.P.C.EO
3 - 25-68 12-15-66 Frank Inthony, et al	12. 15. 65 8- 1-72 Anthony, et al 0294143		Frank DAM-4-56	Brown* Sheirs	Cantinental es no	Amerada etai Sinciair
A.L. Wolf, MI Yesi	Cynthia L. Monroe. etal,kii Eeri Yesi U.S.	u.s.	U.S.M.I. Jogner Earl Vest U.S.	N.F. Humphreys Sholes	3115 Shales Winningham	Jenking Hour (Costy
4	Sinclair,eid 5-1-64(3)	Guis 4-1-71	Texaco Columbion Carbon Amerada	Amerodo Sheily R Lowe Lowe Nam 2	H S Moss 22	Guir Guir
57	069075 7.2.C.E0.	PIETISS	H.B.P. 030177B	Richard Plant 187	A Laws Annuals	1000
Silbenke	Marcel Livavaais, Jr	34	Gulf 1	Can'l Mane Shally	Cooles 'a Byer	
1	9" 1165(1) Frank Ocen??? Anthony, efol (0174606	2-12-23 0 1-20 1 0 3391	T.P. C.E.O.: Col Ser	UNUSEIN
f q	U.S., MI Earl Vest U.S.	∪.s	U.Ş.	Sinte Frank Anthony, (S)	Tederal Seepary Legal	State 1855
10. (46)	n arpogra		Phillips Gulf IPhillips HBP 7-20-72 HBP E-1924 X-2735 E-1924	Texago etal	El Pose Hatt Ges Lawe	El Paso Nati Gas
75 A.	PROPOSED S L. Ares Mart	WD WELL ha Forrest #1	Gulf Gulf Tocos Cintil	030177A	or Little	•,
	L=24-25S Lea County, N	-36E	2	"Shepherd"	CHUT J	5
Sine \$11: 361161			Phillips Cit. Serv Gulf HBP 1-20-72 E-1924 E-2387 K-238	9301778	and i	6'
5.	Car of	1003	is viris stassi Statesi	"Shepherd" U.S., MI U.S. El Paso Nat	US.MI. US	"3hrpherd" U.S.
-140A	Cree 1		Gulf H.B.P.	Gulf H.B.P.	Pan Amer.	Tex sco
o6411 ²			8-228	B-228	tuen t	1

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

ÎNAT

CASE No. 4003

Order No. R- 364/

APPLICATION OF MORRIS R. ANTWEIL 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 December 19, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter

NOW, on this <u>day of December</u>, 1968, 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, Morris R. Antweil
 is the owner and operator of the Martha Forrest Well No. 1
 located in Unit L of Section 24, Township 25 South, Range
 36 East, NMPM, Jaimat Pool Lea
 County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Yates and Seven Rivers perforated and formations with injection into the open-hole interval from approximately 3049 feet to 3159 feet.
- (4) That the injection should be accomplished through

approximately 3030 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing, tubing, or packer.

(5) 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, Morris R. Antweil
is hereby authorized to utilize Ark Martha Forrest Well No. 1
located in Unit L of Section 24 Township 25 South Range
36 East, NMPM, Jalmat Pool , Lea
County, New Mexico, to dispose of produced salt water into the
Yates and Seven River Formations, injection to be accomplished through
27% -inch tubing installed in a packer set at approximately
3030 feet, with injection into the open-hole interva
from approximately 3049 feet to 3159 feet;
PROVIDED HOWEVER, that the tubing shall be plastic-lined;
that the casing-tubing annulus shall be filled with an inert

that the casing-tubing annulus shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing, tubing, or packer.

- (2) That the applicant shall submit monthly reports of 277 disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (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 hereliables designated.