CASE 3941: Application of AGUA, INC. FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

Application Transcripts. Small Exhibits

1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

BEFORE THE

DEC

20

ထ

NEW MEXICO OIL CONSERVATION COMMENSION

Santa Fe, New Mexico

November 12, 1968

EXAMINER HEARING

IN THE MATTER OF:

Application of Agua, Inc.,) for salt water disposal,) Eddy County, New Mexico.)

Case No. 3941

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING



MR. NUTTER: We'll call Case No. 3941.

MR. HATCH: Case 3941, application of Agua, Incorporated, for salt water disposal, Eddy County, New Mexico.

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

I have one witness I'd like to have sworn.

(Witness sworn.)

(Whereupon, Applicant's Exhibits A and B were marked for identification.)

W. G. ABBOTT

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

- Q Would you state your name, please?
- A My name is W. G. Abbott.
- Q By whom are you employed, Mr. Abbott?
- A Adna, Incorporated.
- Q What is your position with Agua, Incorporated?
- A I am a Manager.
- Q Have you ever testified before the Oil Conservation

 Commission and made your qualifications as a petroleum engineer

 a matter of record?

A Yes, sir.

MR. KELLAHIN: Are the witness's qualifications acceptable?

MR. NUTTER: They are. Please proceed.

- Q Mr. Abbott, are you familiar with the application of Agua, Incorporated, in Case No. 3941?
 - A Yes, sir.
 - Q What is proposed by Agua, Incorporated, in this case?
- A We propose to go back in an old abandoned dry hole in the Empire-Abo Pool. Said well is located 660 from the south line and 1980 from the east line of Section 1, Township 18 South, Range 27 East, Eddy County, New Mexico, to convert this dry hole to a salt water disposal well.
- Q Now, was this well originally completed as a producing well in the Abo Formation?
- A No, sir, this was drilled to the Abo, but it was a dry hole. It was drilled by Humble as their Federal Empire-Abo Well No. 3.
- Q Now, referring to what has been marked as Exhibit A, would you identify that exhibit?
- A Exhibit A shows the area in a two-mile radius of this proposed disposal well. The key shows there that the area colored in blue is the area of the Yates-Seven Rivers production.

The area in green is the Queen-Grayburg-San Andres production, and the area in orange is the area of Abo production. We propose to make this disposal well in the San Andres Formation.

- Now, the nearest San Andres production to the location of that well is approximately a mile, is that correct?
 - A Yes, sir.
- Q And does Exhibit A show all of the wells within a two-mile radius of the proposed disposal well?
 - A Yes, sir.
- Q Now, referring to what has been marked as Exhibit B, would you identify that exhibit?
- A Exhibit B is a diagrammatic sketch of this proposed completion. It shows this well, which Agua will call our Agua-Empire-Abo SWD Well O-1. It shows the elevation to be 3630 feet, ground level. It shows eight and five-eighths-inch casing set at 1522 feet and cemented with 850 sacks of cement and the cement is circulated on it.

Then, there's a seven and seven-eighths-inch hole down to a total depth of 6365. We propose to run a five and a half-inch liner from up in the eight and five-eighths-inch and cement the liner at 2050 feet, and we'll dispose in the San Andres Formation from 2050 feet on down to, well, it's the Empire-San Andres, down to around 5400 feet.

- Q Is there a flood at that point at the present time?
- A Yes, sir.
- Q You will then be disposing in the open-hole interval between the 2050 feet down to 5400 feet?
- A Yes, we will have to drill out a 25-foot cement plug at the surface and then a plug at the 1472 feet, 1572, and then we'll wash out this bottom plug or the plug at 5400 feet.
- Now, did this well ever produce from the Grayburg-San Andres?
 - A No, sir.
- Q How will the well be completed for disposal purposes, now?
- A We will run two and a half-inch plastic tubing string to the bottom of the liner at 2050 feet.
 - Q Plastic-lined tubing, is it not?
 - A Yes, plastic-lined tubing.
- Q Will the casing tubing annulus or the annulus between the tubing and the liner be filled with an inert fluid?
 - A Yes, sir. We plan to fill the annulus with sweet oil.
- Q Will there be a pressure gauge at the surface or will you leave it open?
 - A No, we will have a pressure gauge at the surface.
 - Q In your opinion, will the completion of this well for

the disposal of salt water you propose cause any damage to any producing zone or any fresh water zone?

- A No, sir.
- Q What source of water will you dispose of here?
- A At the present time, we'll just have the produced water from about six wells that are producing from the Empire-Abo Pool. The volume is estimated to be about 200 barrels a day and that will be the water that we'll dispose of.
- Q Will you anticipate that other wells will be connected to the disposal system?
 - A Probably in the future there will, yes, sir.
- Q In your opinion, will the zone in which you are disposing of the water take those volumes of water without a pump?
- A We think that we can dispose of this 200 barrels a day by gravity and probably more than that.
- Q Were Exhibits A and B prepared by you or under your supervision?
 - A Yes, sir.

MR. KELLAHIN: At this time, I offer in evidence Exhibits A and B.

MR. NUTTER: Aztec's Exhibits A and B will be admitted in evidence.

(Whereupon, Applicant's Exhibits A and B were admitted in evidence.)

MR. KELLAHIN: That's all I have on direct examination, Mr. Examiner.

CROSS EXAMINATION

BY MR. NUTTER:

- Q Mr. Abbott, as I understand your schematic diagram here, you propose to run 600 feet of five and a half-inch lining, is that correct?
 - A Yes, sir.
- Q And so that would be set at 2050, making the top of it at 1450?
 - A Yes.
- Q And the eight and five is at 1522, so you'll have 72 feet of overlap in your liner and your long string?
 - A Yes, sir.
 - Q I mean, your short string.
- A We hope to bring the cement back up into the eight and five from the liner. We'll cement the liner in place.
- Q As a matter of fact, you'd probably prefer to have the cement come right back up to the top of the liner?
 - A Yes, sir.
 - Q And then the disposal would be down tubing inserted in

that liner?

A Yes, sir.

MR. NUTTER: Are there any other questions of Mr. Abbott? He may be excused. Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all, Mr. Nutter. Thank you.

MR. NUTTER: Does anyone have anything they wish to offer in Case No. 3941? We'll take the case under advisement.

, AV

INDEX

WITNESS			PAGE
W. G. ABBOTT			
Direct Examinati	on by Mr. Ke	llahin	2
Cross Examination	on by Mr. Nutt	ter	7

EXHIBITS	MARKED	OFFERED AND ADMITTED
Applicant's Exhibits	2	7

STATE	OF	NEW	MEXICO)	
)	នន
COUNTY	OF	BEI	RNALILLC)	

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

March REPORTER

I do hereby certify that the foregoing in a complete record of the provendence in the European bearing of Case to 574.

bears by me on 1168.

New Mexico Gil Conservation Commission

GOVERNOR DAVID F. CARGO CHAIRMAN

State of New Mexico

Gil Conservation Commission

LAND COMMISSIONER GUYTON B. HAYS MEMBER

Other



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

P. O. BOX 2088 SANTA FE

November 19, 1963

Mr. Jason Kellahin	Re:	Case No. 3941 Order No. 3941				
Kellahin & Fox Attorneys at Law Post Office Box 1769		Applicant:				
Santa Fe, New Mexico		Agua, Inc.				
Dear Sir:						
Enclosed herewith are two o						
	Very truly	yours,				
	ah Parts					
•	A. L. CORTE Secretary-D					
ALP/ir						
Carbon copy of drder also s	ent to:					
Hobbs OCC x						
Artesia OCC <u>*</u>						
Aztec OCC						

State Engineer Office

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. 3941 Order No. R-3581

APPLICATION OF AGUA, INC., FOR SALT WATER DISPOSAL, EDDY COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 12, 1968, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 19th day of November, 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, Agua, Inc., is the owner and operator of the Empire-Abo SWD Well No. 01, formerly the Humble Federal Empire-Abo Well No. 3, located in Unit O of Section 1, Township 18 South, Range 27 East, NMPM, Empire-Abo Pool, Eddy County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres formation, with injection into the open-hole interval from approximately 2050 feet to 5400 feet.
- (4) That the injection should be accomplished through 2 7/8-inch plastic-lined tubing; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge

-2-CASE NO. 3941 Order No. R-3581

should 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 wasta and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Agua, Inc., is hereby authorized to utilize its Empire-Abo SWD Well No. 01, formerly the Humble Federal Empire-Abo Well No. 3, located in Unit 0 of Section 1, Township 18 South, Range 27 East, NMPM, Empire-Abo Pool, Eddy County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 7/8-inch tubing into the open-hole interval from approximately 2050 feet to 5400 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-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 its 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 CIL CONSETVATION COMMISSION

DAVID F. CARGO, Chairman

SHYTON B. HAYS, MO

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

•sr/

(Case 3939 continued)

Township 31 North, Range 12 West

Richardson Well No. 7 - 1,584 feet from the East line and 1,621 feet from the South line of Section 15

East Well No. 10 1,770 feet from the North line and 790 feet from the West line of Section 26

East Well No. 8 790 feet from the South and East lines of Section 26.

CASE 3940:

Application of Shell Oil Company for an amendment to Order No. R-2808, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-2808 to permit the dedication of a non-standard proration unit authorized therein to its Livingston Wells Nos. 7 and 2 located in Units V and W, respectively, of Section 3, Township 21 South, Range 37 East, Tubb Gas Pool, Lea County, New Mexico. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

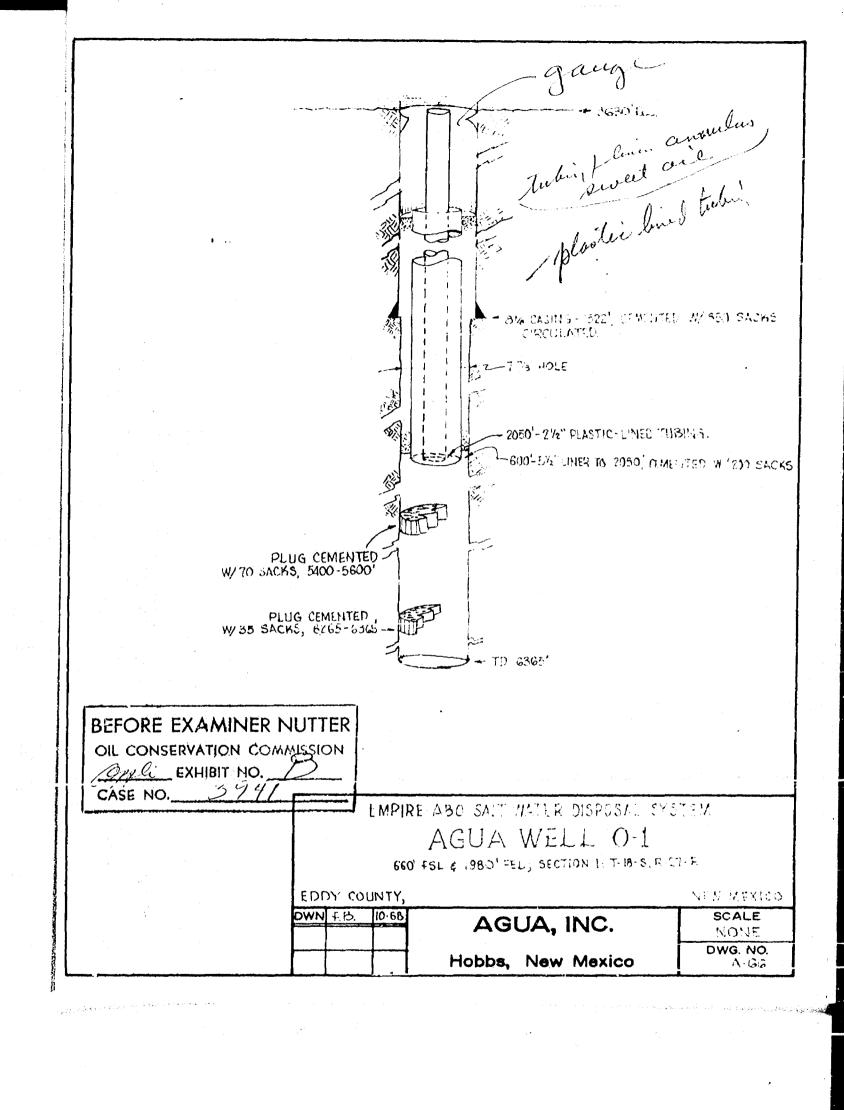
CASE 3941:

Application of Agua, Inc., for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, proposes to dispose of produced salt water into the San Andres formation in the open-hole interval between the casing shoe set at 2050 feet and a cement plug at 5400 feet after cleaning out and acidizing the well between 2050 feet and 3600 feet in its Empire-Abo SWD Well No. 01, formerly the Humble Federal Empire-Abo Well No. 3, located in Unit O of Section 1, Township 18 South, Range 27 East, Empire-Abo Field, Eddy County, New Mexico.

CASE 3942:

Application of Cities Service Oil 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 Yates and Seven Rivers formations in the perforated interval from approximately 3790 feet to 3834 feet in its Closson "B" Well No. 13 located in Unit M of Section 19, Township 22 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.

	ν <u>@</u> .	1.19.70	n se s	10 % 10 mg 1						·			(4) (5)) Terr	- 3 -	-EMP	Nildo"
		10.0	66.75 10.75					8	M. V. Herris (App.) 125547 2369 31	10 / S	3977 A A A A A A A A A A A A A A A A A A	L.C. Belli Corp. or of					\$ 100 mg
	L 19-40 P	3			to roug	****	PETCO IN	<u> </u>	ا ا ــ ــ ابن ـ	X: 90 5	6.5.25	 6	<u> </u> []	Sing.		_	<u> </u>
, 1 -	1.6	الإثناء	33.	ondo 1573	Atlantic		Atlantic DETCO	2 19 52 12 19 52 12 19 52	0557824	Pom Am.	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Hondo 17 - 1 - 71 025528		of Kepple		C CCASA
; •	* 1.4 3		81 2 4 1 30 2 2 2 2 3 3	Single House	Arlantic	8			13 13	auğe Gain Gain		PonAm)Huma	Sales Control	C 40 0 1	.0	27.7	6 K Smary
	A SO CONTROL OF A SO CONTROL O	" i	Signature of the state of the s	Honde Of Grand			20 Human		30	Bell Pot numble see	BC X	: <u>:: :</u> N =		, F100d	7 Hongs		Bell P
· ·	2 - E 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Trees Francis	5	osed		PETCO Heart	PETCO	2 0 E		Novaje DII	OPE Pare	→ 15.12.00 → 15.12.00.001	Bell Day	•) 1920)		
<u>{</u> _	E CANADA		. St.	日。金融等		* ** C * 1.				-	100		128 128 128 128 128 128 128 128 128 128	1	r	€ 3.8 E	
! }		6.	THE PERSON AND THE PE	The Chair and Th	Atlentic Humble	Son Arrest 12 10 10 10 10 10 10 10 10 10 10 10 10 10	Fonder 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	20140 20140	PETCO 1	Humble		R.Hudson, Jr	25 E	3	EA Honson	Rolph Lowe 2 70(2) 565780	
- en-eco	828 C			Tre Abo SWD		g t 148 127 1 148 141 1		i i	,		<u>.</u>	E.R. Hodger, J. 1		 	2) Ciff Dean, et al.	9 (18 G) //	× 1
_	(S) 18	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SWD	Puece 3	33		Hondo 11 -1 -71 056:22	56153 1 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 -	Hondo 11 - 1 - 71 075529		7(0	00184: 00184:	112-176 112-176 112-176			1727
27 mars	21 00 1 22 12 2 2 2 13		965816		Fon A	2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Attontic Attontic Jone Ann Cone Ann Con	USA.M		(Monde) Hendo Pan Am. :- 1: 6121	15 15 8×41	SORED LAKE GRAG.	7 P.	075603		CI-HC DOWN	7
· ·	2 Todas 1 77	Me/co. 1	1 - 1 more of 1	**************************************	7 (C C)			Grapher Carry Carr	034 PORAM		Hongo O	LAKE	Pon Americans	Berry.	22//	(liff Dram etgi Dangers, Bras Kan etgi Danger Kan etgi Sar Rolphion Corsen & Kelly	Highle U.S. Torree
	17 17 2 1 2 1 2 1 2 2 2 2 2 2 2 2 2 2 2	O.	Melco HB2 861858 Fan Amer, 1/2 (opt)		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			(Malio)				GRBG.	0.9156U			Rolphioweda	Braver Highlower To 1740
7		(c) 5		•	3.2			(10) (10) (10) (10) (10) (10) (10) (10)		7.		25 H2000 Pan L		-	1000	CHIEF	e s d
;	Depco, etol	So 22 Pen Handler Lyon, che	Pan Amer Hab That I jig (Agrica Co. 1	THE STATE OF THE S	+ 100 Am					Hoydes	12500 X	Writing 01	1000	۳-۳۲ ۲-۳۶	₩.53;	0357870 S
7.0 X.2 2.7	Smith 1	Hon Am Charles Black Black Black				on Am Pan Am						(0) (0) (0) (0) (0) (0) (0) (0) (0) (0)	¥. ¥. ¥.		5 877Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	MWU 10550 7 an Amer
្តិក សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូម្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគ្គី សូមគមគមគមគមគមគមគមគមគមគមគមគមគមគមគមគមគមគមគ		1		Male	All on the								130 A	/ *	20 J		↑.
	1			Jones, et al.	A	September 1		1			\$ \			3	Amer Man	Toghous and the same of the sa	en series
• • • • • • • • • • • • • • • • • • •	76:01 10:00 P			123 123 123 123 123 123 123 123 123 123	ESIA UNIT	7 R = = - 1						2		4 (18) A	HES School		Sauce Sauce
.# 	9 000 11 S	100.00			RBG.	No market	100 m	801				3.17.7c	\$ \$ \$ \$.			' e	
) or or or or or	P. 1		1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	No. of the last of	20 E V				01.90 P. C.					uperior	٠. هـ. و. ١. هـ. و. و. ١. هـ. و. و.	
- 5-1 - 5-1 - 5-1					Signal Signal					(91. Subject of 192)	(A)	// *** //0 !! ##\	W. 2 (6)		 		
in a series		3.5	Benned 1 647	Table	Forence Age						/ Shell	4 (5)		O AX	.Petro.	Burnhami :	. 2
9.5					12 (A) -		Ado Bally				1 (A)	8 g	2 #1 \$ - •	<u>.</u> j	<u>•• ĵ</u>	<u> </u>	
** • 4.47 • 4.79 • 4.79						anogen Forms By PAB-27			Honge Land	0 5 P	1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5 1.5	r. Petro.		1	!	7	jenn G
2, ⊕ 1, y 2, y 3, y 3, y 3, y 3, y 3, y 3, y 3			9 10 10 10 10 10 10 10 10 10 10 10 10 10	7				le l		124	Pan Amer		aduo	Area	Area	Area	
10 M	NO TO THE PARTY OF	0 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	10 CT				1 6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		175 175 175	TI S	10:0746	1075 1015	Octub	Prod	of of	0f	
	14935 14935 14935	20 P. S.		100 PM	1 4 4 5				3 277		5.00 O	6 cr.	1706	Abo Abo	octi Quee	Yate	
	1 7 7					Perol			2 C E		ontil se	Port Res	C.	Prod	n-(-:	KEY es-Seven	
Total University									•, •,		i Conti	1 (510) 1 (510	0110	n roducti	aybu		
* i * * • j * * • j * •			5 · ½ · .	9.0	1 2] . § [33		V edge			0111169160	1 Op	on n-Œayburg-San	Rivers	
		-0 -1 -1 -1		15 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Defice				3		Canal Canal	4 d ~		7		STS	
-22 0			19 113 A			1 6 3 F	Depre de la companya					Total S	<u>a</u>	D D	Andr		
1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		**************************************	E . 7 %	4 3 4 x		200	Section 1								es.	,	
100 PM		Section 1		V	, .							Ļ					
25° t	-45-27	,	i "".g.	18.5 21.		138		3 ∤ ∎ ≪ 9 ∵4	ri i	+ .◆□	:: \$: \$\	ij.		140	Sal I	Ю Ъ	3



BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

APPLICATION OF AGUA, INC., FOR APPROVAL OF A SALT WATER DISPOSAL SYSTEM, EDDY COUNTY, NEW MEXICO

Carl 3941

APPLICATION

Comes now AGUA, INC., and applies to the Oil Conservation Commission of New Mexico for approval of a salt water disposal system in the Empire-Abo Field, Eddy County, New Mexico, and in support thereof would show the Commission:

- 1. Applicant proposes to convert the Humble Federal Empire-Abo Well No. 3 to salt water disposal, redesignating said well as Agua, Inc., Empire-Abo SWD No. 01.
- 2. The subject well, located 660 feet from the South line and 1980 feet from the East line of Section 1, Township 18 South, Range 27 East, N.M.P.M., Ed.y County, New Mexico, was completed as a dry hole on November 8, 1959, at a total depth of 6365 feet. The 8 5/8-inch casing is set at 1522 feet, and cemented with 850 sacks of cement, the cement circulated. The well was drilled 7 7/8-inch open hole to total depth. At the present there is a 25-foot cement plug at the surface, and the well is plugged from 1472 to 1572 feet, from 5400 to 5600 feet, and a bottom plug from 6265 feet to 6365 feet.
- 3. Applicant proposes to drill the first two plugs; run a 5½-inch liner to 2050 feet, clean out the well bore to 3600 feet and acidize with 10,000 gallons of acid. Disposal through the open hole will be into the San Andres Formation.
- 4. The well will be completed for injection by running a 2½-inch plastic-lined tubing to 2050 feet, and an oil

DOCKET MAILED

D-11-1-68

blanket will be utilized behind the tubing.

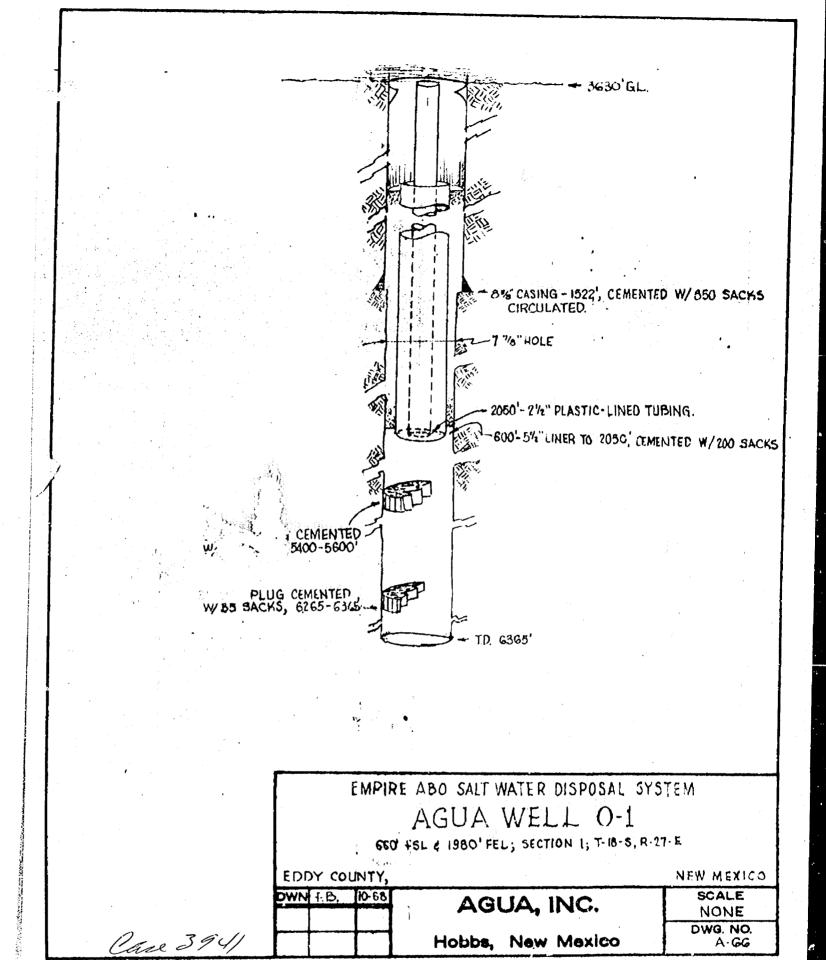
- 5. The well will be utilized for the disposal of an anticipated 200 barrels of produced water per day.
- 6. The zone in which water is purposed to be injected is productive of oil, and it is therefore necessary that this application be set for hearing.

WHEREFORE, applicant prays that this application be set for hearing before the Commission or the Commission's duly appointed examiner, and that after notice and hearing as required by law, the Commission enter its order approving the applicant's proposed salt water disposal system as applied for.

Respectfully submitted, AGUA, INC.

KELLAHIN & FOX
POST OFFICE BOX 1769
SANTA FE, NEW MEXICO

ATTORNEYS FOR APPLICANT



		ondo o	# 5				
				Section 1		1 1 1 1 1 1 1 1 1 1	200
	Design of the second of the se	PE COLUMN TO THE PERSON OF THE		30 Jan. 17:198 86:4888 11:19:49 51:19:49 12:18:49			네일 불렀다
Constitution of the consti	17 :265 51 強	1 18 6 36 8 4 8 5		\ \ ^#' \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	ppie 7		1
1:04	10 10 5 4 4 5 5 5 W	PETCO IN-SHAPE OF THE	Sell Property of the Control of the	Suppose A Kings	TA Hongo	i 18 18	1 2 2
10.35 6.3	"ヤー・五」。 4: 2544ほ	I I SEE EE TO TO TO THE	_0_0_0_0_0_0_0_0_0_0_0_0_0_0_0_0_0_0_0	PLANTER OFF	Flood Fed	5 anders, et al. Hightener Hightener	Desasts Pigon et al. S. U.S.
State of the state			A STATE OF THE STA	Seri Paris, 221-75, cassas; of the life of	E 123 H	180170 700111	
10 H 3 8 7 8 16 1	₹ Þ ", ♂ ⊀.•		# # # # # # # # # # # # # # # # # # #	m 20%	E.A. Horson to 1.66(3)	4 2 3 F	
	on Americal Solutions of the Solutions o			4800 J. 18	353 15	Rolph Lower 13 365790	
	Well 1	Annie de la companya	25 See See See See See See See See See Se	70 × 70 × 70 × 70 × 70 × 70 × 70 × 70 ×	tiiff Beanctel		* Y 5
· 11\O:-a	• 0			100			
Market 1.29	The state of the s	Attentic Come And Come And Com	Thomas Hongs: Serias Francis Control Total Control Serias Francis Control	SQRED LAKE GRBG. UNIT—AM.SPEIR UNIT—AM.SPEIR UNIT—SOPPER USSITE STATES	Attended Att	1 to	Raiph Lowe 2: 1: 70 (2) 665796
1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	: -∤ •┷ · ;; 		Hondo Heyron- i I I I I I I I I I I I I I I I I I I I	LAKI LAKI	Berry Hondo	Sonders, I an, etginingin e 25527 Rolph erson & Kelly	~ ~
Factor (1988)			Royand Royand SST370 Mills TonAm 11/1 TonAm	E GRB	D. D	Cirif Connected Page American Session Section Section Corumn Secti	Anderson 6: 1:73 0380136 Brawer Highlawar 5: 19114
A Heart State Stat	4						٠ <u>.</u> ق
Hands (1992) (1995) Hands (1992) (1995) Hands (1992) (1995) Hands (1992) (1995) Hands (1992) (1992) (1992) Hands (1992) (1992) (1992) Hands (1992) (1992) (1992) Hands (1992) (1992) (1992) (1992) Hands (1992) (1992) (1992) (1992) Hands (1992) (1992) (1992) (1992) (1992) Hands (1992) (1992) (1992) (1992) (1992) (1992) Hands (1992)	Fried Strategy Strate			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Richard 23 s	8	OS MW3 11-21-27 1-27-17-27 1-27-17-27-0 1-27-27-0 11-27-27-0
The state of the s				26 1501 26 1501 1001 1001 1001 1001 1001 1001 1001	Salarion Sal	Fon Ama Nep 0.5527	
	And	Atlantic					61 K.B. 11 OSS7870 12 OSS7870 12 OSS8870 10 OSS
2000					PonAme RolphLoo	Kester L	STORY OF THE STORY
	25 25 25 25 25 25 25 25 25 25 25 25 25 2						
Service of the servic	THE STATE OF	Thum		And Cold Street			¥
2 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1	S. 5805 ES 75. 12. 5				6. 2. 3. 4. 8. 5 6. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5. 5.		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	September 1	See and a second					
20						Trees of the state	٠ <u>٠</u> ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠ ٠
The state of the s		A CONTRACTOR OF THE PARTY OF TH			Par and Andrews		
Section 1		Suntan Su		Pol R Pol R	LA LANGE TO STATE OF THE STATE	200 Care Care Care Care Care Care Care Care	
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Petro.	No. of the last of	1000000 HE	7
Demoily Property Control		700 80 20 20 20 20 20 20 20 20 20 20 20 20 20		Silving & Co.	7		Control of the state of the sta
A Control of the Cont				SEY BAUTO	•		
100 C C C C C C C C C C C C C C C C C C	March March			© (O)		* *	_
100 100 100 100 100 100 100 100 100 100		And			Area	Area Area	· ŏ i
Rumare Paris				200 mg 27 mg	an 1	a of Produ	1
	*			200 and 100 an	Andr	Yat ucti Oue	
					ਲ ਨੂ	1 1	KEY
		Section 1			s Product	Seven R Graybur	- <u>-</u> 5-
12 00 00 00 00 00 00 00 00 00 00 00 00 00		5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5			6 t	<u> </u>	
2 × 2	76				n ion		
	Depo ava	Constitution of the consti		Lings Donn		W	
Ryder Scott	Dependent of the party of the p	2		28 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3			, , , , , , , , , , , , , , , , , , , ,
				. साम्यास्य स्टब्स्या १ ००			~ : na '

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. 394/ Application Of Aqua, Inc., For Salt Water Disposal, Order No. R-358/ Eddy County, New Maxies ORDER OF THE COMMISSION BY THE COMMISSION :

This cause came on for hearing at 9 a.m. on Morenta 121968, at Santa Fe, New Mexico, before Examiner Doniel 5. Nutte.

day of Morender, 1968, the Commission, a NOW, on this__ 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, agua, Oue is the owner and operator of the Empire - Abo SwD Well No., est, formerly the Hermalle Leducal Empire - Abo well See. 3,

 1 located in Unit O of Section 1, Township 18 South, Range 21 East, NNPM, Empire-ass Post County, New Mexico.
 - (3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Aulie formation, with injection into the Open- hole interval from approximately 2050 feet to 5400 feet.
 - (4) That the injection should be accomplished through inch plastic-lined tubing installed in a packer set at

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, agus, due,
is hereby authorized to utilize its Empire - Abo SWD WILL No 6 formerly the Humble Federal Empire-abo Web no. 13, Alocated in Unit O of Section 1, Township 18 South, Range
Alocated in Unit O of Section 1, Township 18 South, Range
27 East, NMPM, Empire - abo Field , Eddy
County, New Mexico, to dispose of produced salt water into the
San andrew formation, injection to be accomplished through
2/228-inch tubing installed in a packer set at approximately
foot, with injection into the ofen-hole interval
from approximately 2050 feet to 5400 feet;

PROVIDED HOWEVER, that the tubing shall be plastic-lined; 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 its 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.