

CASE 3917: Application of AGUA,
INC. FOR SALT WATER DISPOSAL,
LEA COUNTY, NEW MEXICO.

Case Number

3917

Application

Transcripts

Small Exhibits

ETC.

dearnley-meier reporting service, inc.

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS

1120 SIMAS BLDG. • P. O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
November 7, 1968

IN THE MATTER OF:)

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

Case No. 3917

BEFORE: ELVIS A. UTZ

TRANSCRIPT OF HEARING

MR. UTZ: Case 3917.

MR. HATCH: Application of Agua, Inc., for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: If the Examiner please, Jason Kellahin, appearing for the Applicant, Agua, Incorporated. We have one witness I would like to have sworn, please.

(Witness sworn.)

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

* * * * *

W. G. A B B O T T, 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 My name is W. G. Abbott.

Q By whom are you employed and in what position,

Mr. Abbott?

A I am Manager of Agua, Incorporated, in Hobbs, New Mexico.

Q Have you 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. UTZ: Yes, sir, they are.

Q (By Mr. Kellahin) Mr. Abbott, are you familiar with the Application in Case 3917?

A Yes, sir.

Q What is proposed by the applicant in this case?

A We propose to convert an old producing well to a salt water disposal well in the Corbin-Abo salt water disposal system in the Corbin Pool in Lea County, New Mexico.

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

A Exhibit A is a plat, map of the area, with a red radius drawn around the well showing a two-mile radius from the well. The proposed disposal well, the Cities Service Fee MAB No. 1 which will be known as the Corbin-Abo salt water disposal well G 31, this well is shown in red. The brown shaded area to the north of the well is the area of the Grayburg-San Andres production, while the orange area is the Abo-Reeve production, with small areas shown in green of Queen production.

Q Now, what wells then, within the two-mile radius,

are producing from the formation that will be affected by your disposal well?

A Just the area shaded in brown.

Q The Abo production?

A No, the Grayburg-San Andres.

Q And that is the Maljamar Unit operated by Cities Service?

A Yes, sir.

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

A Exhibit B is a diagram of the well and the proposed disposal interval. This well is located 1980 feet from the north line and 1980 feet from the east line of Section 31, Township 17 South, Range 33 East. This diagram shows the ground level elevation at 3983, with 13 and 3/8ths-inch casing at 296 feet, cemented with 225 sacks and the cement circulated to the surface. The 8 and 5/8ths inch casing is at 2879, cemented with, I think, it says 650 sacks. There is 5 and 1/2-inch casing in the well cemented or set at 4894 feet and cemented with 175 sacks of cement. There are certain perforations that are still open in the well from 4530 to 5845 and 4598 to 4628. These were in the Grayburg-San Andres production. We plan to run a string of 2 and 7/8ths-

inch internally plastic-lined tubing to 4530 in the well and then load the annulus space between the 5 and 1/2-inch casing and the 2 and 7/8ths-inch tubing with oil and maintain that oil to cover the exterior of the tubing in the interior of the 5 and 1/2-inch casing.

Q Will you have a pressure gauge at the surface or leave the annulus open?

A No, we'll have a pressure gauge and maintain a positive pressure on the oil. The disposal interval will be, if you include the perforations that are open, it will be the open hole interval from below the 5 and 1/2-inch casing down to 6375. This well was an Abo dry hole so it's total depth is 9020 and we propose to wash out this open hole interval down to 6375 and place a cement plug at that point and we will dispose in this whole interval.

Q What volume will you inject into this well?

A Initially we will be putting about a thousand barrels a day in it.

Q What is the source of the water?

A Water is produced in the Corbin-Abo Pool and from a few wells in the Corbin-Queen Pool.

Q Is this water corrosive?

A Yes, sir, it's corrosive. The parts per million

chlorides are shown for the Abo water to be about 109,800 parts per million.

Q In your opinion will the completion of the well for use as an injection well as you propose adequately protect any fresh water zones that might be in the area or any producing zones.

A Yes, sir.

Q Will it have any adverse effect on the Grayburg-San Andres formation presently being produced in the vicinity of this well?

A No, sir, it might even help the production, I mean the flood up north.

Q The Maljamar Unit is subject to a flood at the present time, is it not?

A Yes, sir.

Q Then you anticipate that this might even help that flood, is that correct?

A Yes, it wouldn't hurt it.

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. UTZ: Without objection, Exhibits A and B will be entered into the record of this case.

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

MR. KELLAHIN: That completes the direct examination, Mr. Utz.

CROSS EXAMINATION

BY MR. UTZ:

Q The injection interval will be the old producing formation as well as the open hole from 4894 to 6375?

A Yes.

Q What formation does this include?

A That covers the entire San Andres formation.

Q Any of the Grayburg?

A No, I don't believe any of the Grayburg will be open. This well is located sort of a transition from the basin complex in the platform and so actually when I say San Andres, there may be some Delaware Sands open in this interval, but they're non-productive.

Q Do you have any idea what the top of the cement is on the 8 and 5/8ths-inch?

A No, sir, this well was originally drilled by Carper, which Carper was bought out by Cities Service and

I don't know if the records show that.

Q Do you have an opinion as to how many feet 650 sacks would cover behind the 8 and 5/8ths?

A I imagine it would go up into the 13 and 3/8ths. Of course, we don't plan to let any salt water stand in even the 5 and 1/2-inch casing.

Q What procedure do you use to float the oil in the annulus?

A Usually the static fluid level in the San Andres will be 800 to a thousand feet from the surface, so actually you have to pump the oil in and force the salt water down and it will stay there providing you don't have any leak in your tubing or casing which is one thing you want to know. I mean, that's the reason for putting the pressure gauge, if we ever get a leak in the tubing, then we'll know we have a leak and it will stay there forever.

Q But you do pump the oil, then, down the annulus and circulate it back out the tubing or do you just measure the volume?

A We measure the volume, with a little excess in it. A little excess doesn't hurt the disposal formation, it's been my experience when you use an oil blanket like this if you come back five years later and pull the tubing out of

the well, you can read the chalk marks on the tubing. It will keep down any corrosion.

Q You use sweet oil, no doubt?

A Yes.

MR. UTZ: Any other questions of the witness?

He may be excused.

(Witness excused.)

MR. UTZ: Any statements in this case? We will take the case under advisement.

I N D E X

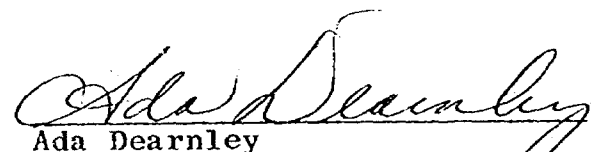
WITNESS	PAGE
<u>W. G. ABBOTT</u>	
Direct Examination by Mr. Kellahin	2
Cross Examination by Mr. Utz	7

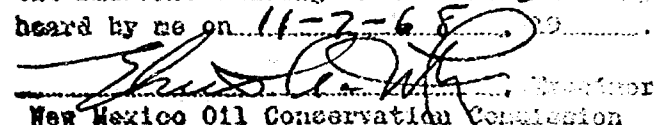
<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's A and B	2	7

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 21st day of November, 1968.


 Ada Dearnley

I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of Case No. 3917, heard by me on 11-2-68.

 New Mexico Oil Conservation Commission

GOVERNOR
DAVID F. CARGO
CHAIRMAN

State of New Mexico
Oil Conservation Commission



LAND COMMISSIONER
GUYTON B. HAYS
MEMBER

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

P. O. BOX 2088
SANTA FE

November 19, 1968

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

Re: Case No. 3917
Order No. R-3564
Applicant:
Agua, Inc.

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.
A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Carbon copy of order also sent to:

Hobbs OCC x

Artesia OCC

Aztec OCC

Other 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. 3917
Order No. R-3564

APPLICATION OF AGUA, 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 November 7, 1968, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

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 Corbin SWD Well No. G-31, located in the SW/4 NE/4 of Section 31, Township 17 South, Range 33 East, NMPM, Corbin Field, Lea County, New Mexico.

(3) That the applicant proposes to utilize said well to dispose of produced salt water into the San Andres and other formations, with injection into the perforated and open-hole interval from approximately 4530 feet to 6375 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 should be attached to the annulus at the surface in order to determine leakage in the casing or tubing.

-2-

CASE No. 3917
Order No. R-3564

(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:

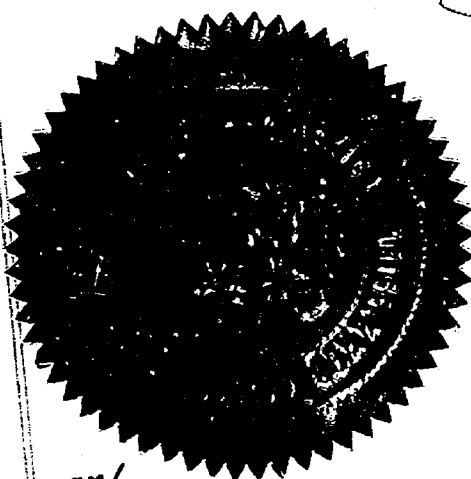
(1) That the applicant, Agua, Inc., is hereby authorized to utilize its Corbin SWD Well No. G-31, located in the SW/4 NE/4 of Section 31, Township 17 South, Range 33 East, NMPM, Corbin Field, Lea County, New Mexico, to dispose of produced salt water into the San Andres and other formations, injection to be accomplished through 2 7/8-inch tubing, with injection into the perforated and open-hole interval from approximately 4530 feet to 6375 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 or tubing.

(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.



esr/

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

David F. Cargo
DAVID F. CARGO, Chairman

Guyton E. Hays
GUYTON E. HAYS, Member

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

3917

Heard 11-7-68

Rec. 91-8-68

1. Grant Aqua, Inc. permission to convert the Cities Service, Tree 'B' #1 S-31-175-33E (to be renamed Aqua-Cotton SWD S-31) to S.W.D. injection thru 2 $\frac{3}{8}$ plastic coated tubing and into reefs at 4536-4628 and open hole from 4884-6375 in S.A. zone. The 5 $\frac{1}{2}$ x 2 $\frac{3}{8}$ annulus shall be filled with Sweet Crude and a pressure gauge used on surface.

Thos. H. W.

Docket No. 32-68

DOCKET: EXAMINER HEARING - THURSDAY - NOVEMBER 7, 1968

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

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

CASE 3910: (Continued from the October 23, 1968 Examiner Hearing)

Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SW/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Said acreage to be dedicated to a well located in the NE/4 SW/4 of said Section 17.

CASE 3911: (Continued from the October 23, 1968 Examiner Hearing)

Application of Atlantic Richfield Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SE/4 of Section 8, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Said acreage to be dedicated to a well located in the NW/4 SE/4 of said Section 8. In the alternative applicant seeks approval of a non-standard oil proration unit comprising the E/2 SE/4 of said Section 8 and the W/2 SW/4 of Section 9, said Township and Range, said unit to be dedicated to a well to be drilled in the NE/4 SE/4 of said Section 8.

CASE 3894: (Continued and Readvertised)

Application of Signal Oil and Gas Company for a non-standard oil proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of a non-standard oil proration unit comprising the W/2 NE/4 and the N/2 SE/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico, said unit to be dedicated to its State AP Well No. 1 located 1980 feet from the South line and 660 feet from the East line of said Section 17.

In the alternative, applicant seeks approval of an 80-acre non-standard oil proration unit comprising the N/2 SE/4 of

(Case 3894 continued)

said Section 17 and the assignment of approximately 79% of a standard 160-acre unit allowable for said pool to said 80-acre unit.

CASE 3918: Application of R. R. Morrison for three non-standard proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of three non-standard 80-acre oil proration units in Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, described as follows:

Unit No. 1 comprising the E/2 SW/4 of Section 17, dedicated to applicant's State "17" Well No. 1 located in Unit K of said Section 17;

Unit No. 2 comprising the E/2 NE/4 of Section 17, dedicated to applicant's Atlantic "A" State Well No. 1 located in Unit A of said Section 17;

Unit No. 3 comprising the W/2 SE/4 of Section 8, dedicated to applicant's State "B" Well No. 1 located in Unit J of said Section 8.

Applicant further seeks the assignment of approximately 79% of a standard 160-acre unit allowable for said pool to each of the aforesaid 80-acre units.

CASE 3919: Application of Sunray DX Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SE/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Said acreage to be dedicated to Signal Oil Company's State AP Well No. 1 located in Unit I of said Section 17. In the alternative applicant seeks approval of a non-standard proration unit comprising the S/2 SE/4 of said Section 17 and the N/2 NE/4 of Section 20, said Township and Range, said unit to be dedicated to applicant's New Mexico "AW" Well No. 1 located in the NE/4 NE/4 of said Section 20.

CASE 3912: Application of American Petrofina Company of Texas for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres, Glorieta, and Abo formations in the open-hole interval from approximately 4211 feet to 8690 feet in its Federal "C" Well No. 2 located in

(Case 3912 continued)

Unit E of Section 21, Township 8 South, Range 36 East, South Prairie-Cisco Pool, Roosevelt County, New Mexico.

CASE 3913: Application of Pan American Petroleum Corporation for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian "D" formation in the perforated interval from 6267 feet to 6286 feet in its Navajo Tribal "U" Well No. 1 located in Unit L of Section 21, Township 26 North, Range 18 West, Tocito Dome-Pennsylvanian "D" Pool, San Juan County, New Mexico. Applicant further seeks an administrative procedure whereby other wells in said pool may be approved for disposal purposes, if completed in a manner similar to the subject well, without the requirement of notice and hearing.

CASE 3914: Application of Texas Pacific 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 Seven Rivers and Queen formations in the open-hole interval from approximately 3721 feet to 3995 feet in its State "A" a/c-2 Well No. 6 located in Unit B of Section 7, Township 22 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

CASE 3915: Application of Texas Pacific 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 Pennsylvanian formation in the perforated interval from approximately 9570 feet to 9972 feet in its State "AH" Well No. 2 located in Unit N of Section 14, Township 12 South, Range 34 East, Ranger Lake Field, Lea County, New Mexico.

CASE 3916: Application of Texas Pacific Oil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 6686 feet to 6830 in its Woolley Federal No. 1 located in Unit M of Section 21, Township 17 South, Range 30 East, Loco Hills-Abo Pool, Eddy County, New Mexico.

CASE 3917: Application of Agua, 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 San Andres and other formations in the interval from approximately 4530 feet to 6375 feet in its Corbin SWD Well No. G-31 located in the SW/4 NE/4 of Section 31, Township 17 South, Range 33 East, Corbin Field, Lea County, New Mexico.

November 7, 1968, Examiner Hearing

Docket No. 32-68

-4-

- CASE 3920: Application of Kern County Land Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4158 feet to 4233 feet in its Federal 23 Well No. 11 located in Unit F of Section 23, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3921: Application of Kern County Land Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4165 feet to 4291 feet in its Federal 21 Well No. 3 located in Unit O of Section 21, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3922: Application of Tenneco Oil Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4214 feet to 4344 feet in its State "V" Well No. 3 located in Unit K of Section 30, Township 7 South, Range 34 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3923: Application of Tenneco Oil Company for salt water injection, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject produced salt water into the Wolfcamp formation in the perforated interval from approximately 10642 feet to 10699 feet in its Kemnitz-Wolfcamp Unit Well No. 7 located in Unit O of Section 19, Township 16 South, Range 34 East, Kemnitz-Wolfcamp Pool, Lea County, New Mexico.

Docket No. 32-68

DOCKET: EXAMINER HEARING - THURSDAY - NOVEMBER 7, 1968

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

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

3918
Clarence
Heinkle
Richard (Marrion)
Signal
Jason
(BTA) all
Boaker Kelly
Sum. D. 1
Rev. all cases
CASE 3910: (Continued from the October 23, 1968 Examiner Hearing)
Application of Atlantic Richfield Company for compulsory
pooling, Lea County, New Mexico. Applicant, in the above-
styled cause, seeks an order pooling all mineral interests
in the Bough "C" zone of the Pennsylvanian formation under-
lying the SW/4 of Section 17, Township 10 South, Range 34
East, Vada-Pennsylvanian Pool, Lea County, New Mexico.
Said acreage to be dedicated to a well located in the NE/4
SW/4 of said Section 17.

Capt. 3911
Bill Brown
3911 + 3918
CASE 3911: (Continued from the October 23, 1968 Examiner Hearing)

Application of Atlantic Richfield Company for compulsory
pooling, Lea County, New Mexico. Applicant, in the above-
styled cause, seeks an order pooling all mineral interests
in the Bough "C" zone of the Pennsylvanian formation under-
lying the SE/4 of Section 8, Township 10 South, Range 34
East, Vada-Pennsylvanian Pool, Lea County, New Mexico.
Said acreage to be dedicated to a well located in the NW/4
SE/4 of said Section 8. In the alternative applicant seeks
approval of a non-standard oil proration unit comprising the
E/2 SE/4 of said Section 8 and the W/2 SW/4 of Section 9,
said Township and Range, said unit to be dedicated to a
well to be drilled in the NE/4 SE/4 of said Section 8.

CASE 3894: (Continued and Readvertised)

Application of Signal Oil and Gas Company for a non-standard
oil proration unit, Lea County, New Mexico. Applicant, in
the above-styled cause, seeks approval of a non-standard oil
proration unit comprising the W/2 NE/4 and the N/2 SE/4 of
Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian
Pool, Lea County, New Mexico, said unit to be dedicated to its
State AP Well No. 1 located 1930 feet from the South line and
660 feet from the East line of said Section 17.

In the alternative, applicant seeks approval of an 80-acre
non-standard oil proration unit comprising the N/2 SE/4 of

(Case 3894 continued)

said Section 17 and the assignment of approximately 79% of a standard 160-acre unit allowable for said pool to said 80-acre unit.

CASE 3918: Application of R. R. Morrison for three non-standard proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of three non-standard 80-acre oil proration units in Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, described as follows:

Unit No. 1 comprising the E/2 SW/4 of Section 17, dedicated to applicant's State "17" Well No. 1 located in Unit K of said Section 17;

Unit No. 2 comprising the E/2 NE/4 of Section 17, dedicated to applicant's Atlantic "A" State Well No. 1 located in Unit A of said Section 17;

Unit No. 3 comprising the W/2 SE/4 of Section 8, dedicated to applicant's State "B" Well No. 1 located in Unit J of said Section 8.

Applicant further seeks the assignment of approximately 79% of a standard 160-acre unit allowable for said pool to each of the aforesaid 80-acre units.

CASE 3919: Application of Sunray DX Oil Company for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Bough "C" zone of the Pennsylvanian formation underlying the SE/4 of Section 17, Township 10 South, Range 34 East, Vada-Pennsylvanian Pool, Lea County, New Mexico. Said acreage to be dedicated to Signal Oil Company's State AP Well No. 1 located in Unit I of said Section 17. In the alternative applicant seeks approval of a non-standard proration unit comprising the S/2 SE/4 of said Section 17 and the N/2 NE/4 of Section 20, said Township and Range, said unit to be dedicated to applicant's New Mexico "AW" Well No. 1 located in the NE/4 NE/4 of said Section 20.

Booked March 11 to discuss alternative

CASE 3912: Application of American Petrofina Company of Texas for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres, Glorietta, and Abo formations in the open-hole interval from approximately 4211 feet to 8690 feet in its Federal "C" Well No. 2 located in

See page 11

November 7, 1968 - Examiner Hearing

Docket No. 32-68

-3-

(Case 3912 continued)

Unit E of Section 21, Township 8 South, Range 36 East, South Prairie-Cisco Pool, Roosevelt County, New Mexico.

Louis Ross
CASE 3913: Application of Pan American Petroleum Corporation for salt water disposal, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Pennsylvanian "D" formation in the perforated interval from 6267 feet to 6286 feet in its Navajo Tribal "U" Well No. 1 located in Unit L of Section 21, Township 26 North, Range 18 West, Tocito Dome-Pennsylvanian "D" Pool, San Juan County, New Mexico. Applicant further seeks an administrative procedure whereby other wells in said pool may be approved for disposal purposes, if completed in a manner similar to the subject well, without the requirement of notice and hearing.

Jack Russell
CASE 3914: Application of Texas Pacific 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 Seven Rivers and Queen formations in the open-hole interval from approximately 3721 feet to 3995 feet in its State "A" a/c-2 Well No. 6 located in Unit B of Section 7, Township 22 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

Jack Russell
CASE 3915: Application of Texas Pacific 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 Pennsylvanian formation in the perforated interval from approximately 9570 feet to 9972 feet in its State "AH" Well No. 2 located in Unit N of Section 14, Township 12 South, Range 34 East, Ranger Lake Field, Lea County, New Mexico.

Jack Russell
CASE 3916: Application of Texas Pacific Oil Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Abo formation in the perforated interval from approximately 6686 feet to 6830 in its Woolley Federal No. 1 located in Unit M of Section 21, Township 17 South, Range 30 East, Loco Hills-Abo Pool, Eddy County, New Mexico.

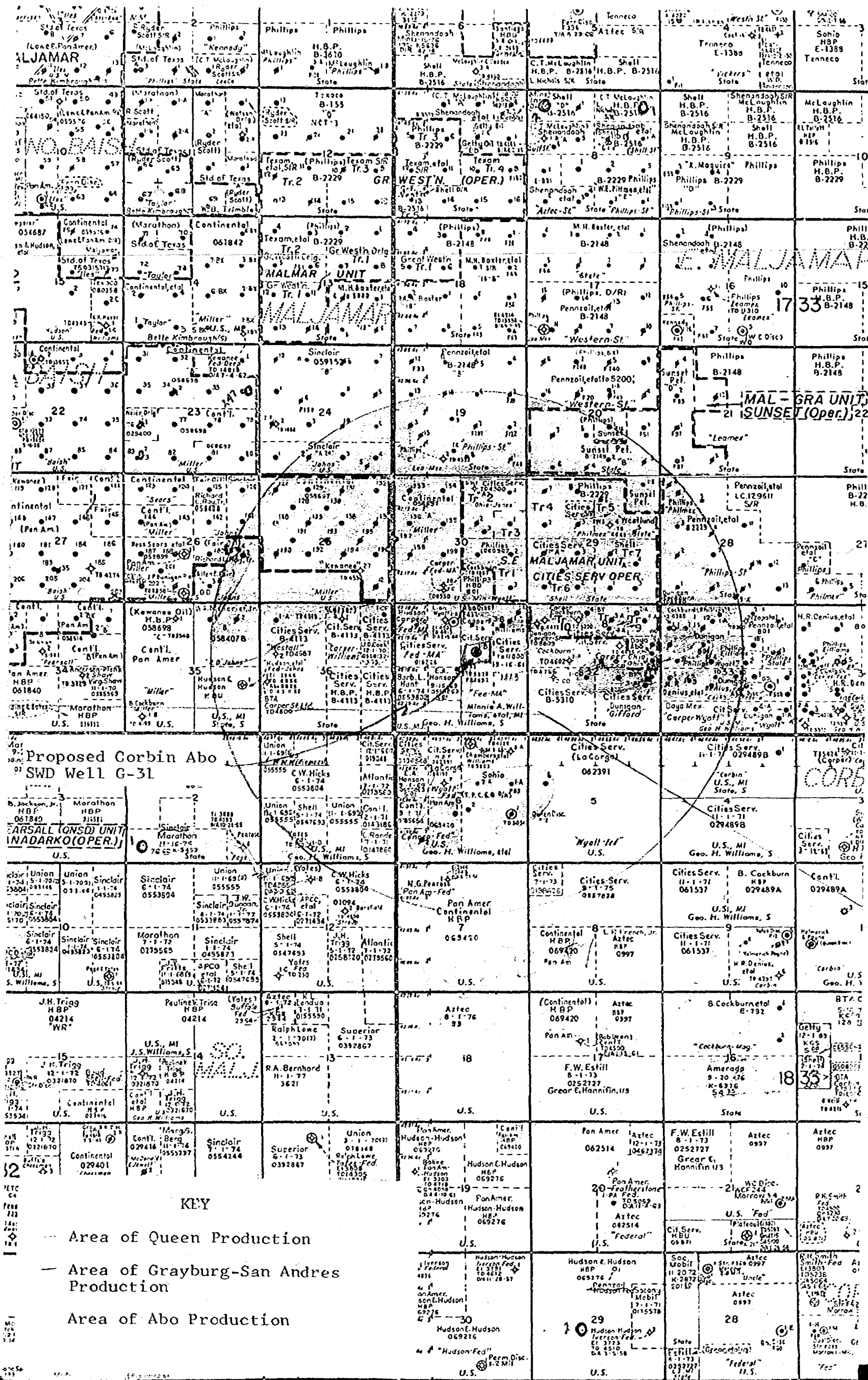
Jason
CASE 3917: Application of Agua, Inc., for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres and other formations in the interval from approximately 4530 feet to 6375 feet in its Corbin SWD Well No. G-31 located in the SW/4 NE/4 of Section 31, Township 17 South, Range 33 East, Corbin Field, Lea County, New Mexico.

November 7, 1968, Examiner Hearing

Docket No. 32-68

-4-

- CASE 3920: Application of Kern County Land Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4158 feet to 4233 feet in its Federal 23 Well No. 11 located in Unit F of Section 23, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3921: Application of Kern County Land Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4165 feet to 4291 feet in its Federal 21 Well No. 3 located in Unit O of Section 21, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3922: Application of Tenneco Oil Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4214 feet to 4344 feet in its State "V" Well No. 3 located in Unit K of Section 30, Township 7 South, Range 34 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 3923: Application of Tenneco Oil Company for salt water injection, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to inject produced salt water into the Wolfcamp formation in the perforated interval from approximately 10642 feet to 10699 feet in its Kemnitz-Wolfcamp Unit Well No. 7 located in Unit O of Section 19, Township 16 South, Range 34 East, Kemnitz-Wolfcamp Pool, Lea County, New Mexico.



3 3/8" CASING - 296' CEMENTED w/ 225 SACKS
CIRCULATED

Pressure gauge

2883' G.

Probably

T.C. ... volume

5 7/8" TUBING - 337' LEMPERT w/ 650 SACKS

load w/ oil

2 7/8" PLASTIC-LINED TUBING - 4530'

PERF. 4530' - 153' 1503' 1623'

R. S.A.

5 7/8" CASING - 4224' CEMENTED w/ 115 SACKS

469'

3375'

PB 6375'

OTD - 9020'

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
Appli EXHIBIT NO. *B*
CASE NO. *3917*

CORWIN ABO SWD TOWER
AGUA HELL G 31

1980' ENL 1980' FEL; SECTION 31, T17S, R23E

LEA COUNTY,

DWN	F.B.	10-68

AGUA, INC.

Hobbs, New Mexico

NEW MEXICO

SCALE
1" = 100'

DWG. NO.
A 58

AGUA, INC.

POST OFFICE BOX 1978
HOBBS, NEW MEXICO
88240

October 15, 1968

TELEPHONE: AC 505 393-2417

Case 3917

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

Re: Corbin SWD Well

Gentlemen:

Attached is our application for hearing on a disposal well, Corbin Salt Water Disposal Well G-31.

Please place this application for hearing on your earliest docket which, I understand, will be held November 7, 1968.

Three copies of the area plat, diagram of well, and electrical logs will be forwarded to you later on this week to be included with this application.

Respectfully submitted,

AGUA, INC.

W. G. Abbott

W. G. Abbott
Manager

WGA/j

Enc.

CC Mr. Jason Kellahin

DOCKET MAILED

Date *10-25-68*

AGUA, INC.

POST OFFICE BOX 1978

HOBBS, NEW MEXICO
88240

October 17, 1968

TELEPHONE: AC 505 393-2417

Case 3917

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

Re: Corbin SWD Well

Gentlemen:

As mentioned in our letter of October 15, 1968, we are enclosing with this letter three copies of the area plat, diagram of well, and electrical logs for the purpose of securing authorization for salt water disposal in the Corbin Salt Water Disposal Well G-31.

Yours very truly,

AGUA, INC.

W. G. Abbott

W. G. Abbott
Manager

WGA/j
Enclosures

CC Mr. Jason Kellahin

10/18/68

BEFORE THE
OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF
AGUA, INC. FOR APPROVAL OF A SALT
WATER DISPOSAL WELL, LEA COUNTY,
NEW MEXICO

Case 3917

100 Oct 15 1960

A P P L I C A T I O N

Comes now AGUA, INC. and applies to the Oil Conservation Commission of New Mexico for an order approving the disposal of salt water in applicant's CORBIN Salt Water Disposal Well G-31, located in the SW/4 NE/4 of Section 31, Township 17 South, Range 33 East, Lea County, New Mexico, and in support thereof would show the Commission:

1. Applicant is the operator of the Corbin Abo Salt Water Disposal System and as agent for the System has purchased the Cities Service Fee MA "B" No.1 to be known as Corbin Salt Water Disposal Well G-31.
2. Said well was drilled to a total depth of 9,020 feet to test the Abo formation, and was dry in the Abo.
3. Said well has 13-3/8 inch surface casing set at 296, cemented with 225 sacks of cement, the cement was circulated; the 8-5/8 inch intermediate casing was set at 2,879 feet and cemented with 650 sacks of cement; the 5-1/2 inch casing was set at 4,894 feet and cemented with 175 sacks of cement.
4. The 5-1/2 inch casing in said well was perforated from 4,530 to 4,558 feet, 4,598 to 4,628 feet, 4,720 to 4,740 feet and from 4,750 to 4,780 feet. The perforations from 4,720 to 4,740 feet and 4,750 to 4,780 feet have been squeezed. At present there are bridge plugs set at 4,593, 4,700 and 4,896 feet. The well has been abandoned after

producing about 9,000 barrels of oil from the San Andres zone.

5. Applicant proposes to drill out plugs in 5-1/2 inch casing and 7-7/8 inch hole to 6,375 feet. A cement plug will be placed at this point. The disposal zone from 4,530 to 6,375 would then be acidized with 10,000 gallons of 15% acid.

6. For purposes of salt water disposal, applicant proposes to run 4,530 feet of 2-7/8 inch plastic lined tubing.

7. It is proposed to utilize the well to dispose of produced water from the Corbin Abo Pool and certain wells from the Corbin Queen Pool. Initial injection volumes are expected to be approximately 1,000 barrels per day.

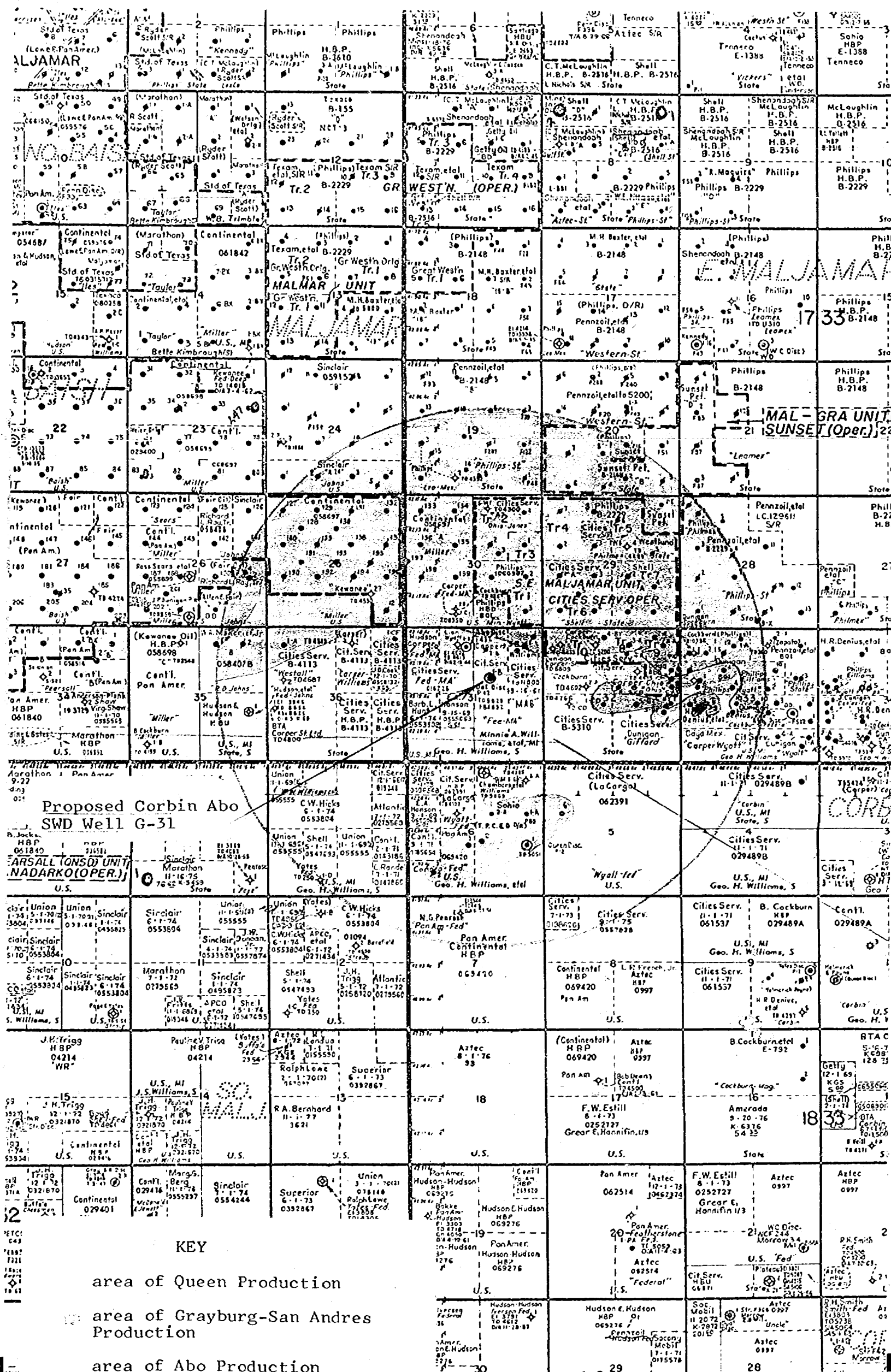
8. Approval of this application will result in the prevention of waste and the protection of correlative rights.

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

Respectfully submitted,

AGUA, INC.

By: W. G. Abbott
W. G. Abbott
AGUA, INC.
Post Office Box 1978
Hobbs, New Mexico



13 3/8" CASING - 256' CEMENTED w/ 225 SACKS,
CIRCULATED

8 1/2" CASING - 379' CEMENTED w/ 225 SACKS

2 7/8" PLASTIC-LINED TUBING - 4530'

PERES 4530-53', 4598-4628'

5 1/2" CASING - 4894' CEMENTED w/ 175 SACKS

PB 6375'

OTD - 8020'

CORBIN ABO SWD SYSTEM
AGUA WELL G 31

1980' ENL 1980' FEL; SECTION 31, T17S R22E

LEA COUNTY,

DWN	F B	10-68

AGUA, INC.

Hobbs, New Mexico

NEW MEXICO

SCALE

DWG. NO.

4-58

DRAFT

GMH/esr


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. 3917

Order No. R-3564

APPLICATION OF AGUA, 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 November 7, 1968,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ 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 Corbin SWD Well No. G-31,
the SW/4 NE/4
located in Unit/ of Section 31, Township 17 South, Range
33 East, NMPM, Corbin Field, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres and other
formations, with injection into the _____ interval
from approximately 4530 feet to 6375 feet.

(4) That the injection should be accomplished through
2 1/2-inch plastic-lined tubing installed in a packer set at

CASE No. 3917.

~~approximately _____ 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, ^{or} 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, Agua, Inc. is hereby authorized to utilize its Corbin SWD Well No. G-31 the SW/4 NE/4 located in W44/44 of Section 31, Township 17 South, Range 33 East, NMPM, Corbin Field, Lea County, New Mexico, to dispose of produced salt water into the ^{other} ~~San Andres and/~~ formations, injection to be accomplished through 2 1/4-inch tubing, ~~installed in a packer set at approximately _____ feet,~~ with injection into the ~~perforated and open hole~~ interval from approximately 4530 feet to 6375 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.