

CASE 4093: Application of BTA OIL
PRODUCERS FOR SALT WATER DISPOSAL
LEA COUNTY, NEW MEXICO.

Case Number.

4093

Application

Transcripts.

Small Exhibits

ETC.

dearnley-meier

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

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



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

June 4, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil
Producers for salt water
disposal, Lea County, New
Mexico.

Case 4093

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

JUL 23 1969

MR. HATCH: Case 4093, reopened. Application of BTA Oil Producers for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, appearing for the Applicant. We have one witness I would like to have sworn.

If the Examiner please, I would assume, this Case being reopened, that the record in the previous Hearing on this matter will be a part of the Case?

MR. NUTTER: Yes, the record in the previous Case will be part of this Case. And, as I understand it, the Commission has authorized these two wells that are the subject of the Hearing today for salt water disposal, and that the only thing we are having the Hearing on today is to change the interval of injection?

MR. KELLAHIN: That's correct.

MR. NUTTER: So the new Order will be an amendment to Commission Order R-2378.

(Thereupon, Applicant's Exhibits 1 and 2 were marked for identification.)

JERRY MORITZ

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name, please?

A Jerry Moritz.

Q Are you the same Mr. Moritz who testified in Case 4093 at the previous Hearing?

A Yes.

Q Are you familiar with the application of BTA Oil Producers in this Case?

A Yes.

Q Mr. Moritz, you have testified before the Commission, and your qualifications are a matter of record?

A Yes.

Q You heard the statement made by Mr. Nuxter as to the nature of this Case being solely for the purpose of changing the injection interval on the two wells involved?

A Yes.

5 1/2 inch casing a little higher than previously proposed. This was due to the lost circulation that we had been advised occurred in the Devonian, so we set the pipe a little higher so as not to lose this hole, and we subsequently set a liner across mainly the Woodford section to eliminate any caving or falling in of the Woodford section.

Q Will the type of completion that you propose to make adequately protect all the formation?

A I believe it will.

Q You will still inject through internally coated tubing under a packer, and with the annulus filled with an inert fluid?

A Yes.

Q Will you use a gauge at the surface?

A Yes.

Q Now, will you explain Exhibit No. 2?

A Exhibit No. 2 is a schematic of the Pray No. 2, showing where the casing is set presently at 12,154, with a new TD of 12,502. We are asking that we be allowed to inject into the full Devonian section from 12,088 to 12,502.

Q And originally the Order provided it would go

to what depth? Was it 12,164?

A Yes, to 12,164, and we are just asking that it be extended to 12,502.

Q Will the completion in the Well No. 2 be the same as was originally proposed?

A Yes.

Q There are no changes in it?

A No.

Q What is the reason for asking for this change?

A Our reasoning was that in getting the total depth in both wells, we did not feel that the Devonian was taking as much water as it should, so we extended the total depth to open up more Devonian porosity, so that we could get more water into the wells. We still feel that we are in the Devonian, though, in both cases.

Q Were Exhibits 1 and 2 prepared by you or under your supervision?

A Yes.

MR. KELLAHIN: At this time, I offer in evidence Exhibits 1 and 2.

MR. NUTTER: Applicant's Exhibits 1 and 2 will be admitted in evidence.

(Thereupon, Applicant's Exhibits 1 and 2 were admitted in evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Moritz, now, with respect to the No. 1 Well, it is my understanding you have a 60 foot overlap of the liner in the 5 1/2 inch casing?

A Yes.

A And then you would be disposing into perforations from 12,233 to 12,305, and in the open hole from 12,305 to 12,500?

A No, we do not have any perforations in the well. Essentially, our disposal interval that is open will be from the bottom of the liner at 12,305 to 12,500.

Q So this original interval from 12,233 to 12,275 won't be used? It will be cased off with the liner?

A Possibly, yes. I think probably that's right, we do have the liner across there. It is not cemented in the hole, though. It is a hung liner.

Q Well, then, the actual disposal could be into the open hole, and also into the interval from clear on up to the casing shoe on the 5 1/2?

A Yes. We did not, in the drilling of this well, lose any fluids in this interval in the Woodford, or even actually in the top of the Devonian there.

Q The Woodford shale is opposite your liner?

A Yes. And from indications while we were drilling and testing the well, we feel that probably this Woodford is going to cave out considerably against this liner, and possibly could act as a pretty good seal there.

Q So in effect, then your disposal interval will be 12,275 to 12,500?

A I don't understand the 12,275.

Q Well, that is --

A Oh, the old total depths.

Q Oh, I'm sorry, I was reading the old total depths. See, it looks like it is right opposite that shoe on the liner. But the liner is 12,305?

A Right. Bottom of the liner is 12,305.

Q What you would want would be to authorize injection into the open hole interval 12,305 to 12,500?

A Right.

Q And in the other well, the disposal would be through perforations from 12,088 to 12,154, and open hole from 12,154 to 12,502?

A Again, this 12,088 is just the top of the Devonian, and we only included this to include all the

Devonian. I don't think there will be any injection above -- yes, 12,154 to be actually cemented in.

Q You won't perforate this casing, then?

A No.

Q The previous Order was from 12,088 to 12,164, which would have been a perforated interval, plus ten feet of open hole. Now, we are not talking about the perforations, we are only talking about open hole from 12,154 to 12,502.

A Right.

MR. NUTTER: Any further questions of Mr. Moritz? You may be excused. Do you have anything further?

MR. KELLAHIN: That is all.

MR. NUTTER: We will take the Case under advisement, and call Case 4144.

INDEXWITNESS

JERRY MORITZ

Direct Examination by Mr. Kellahin

Cross Examination by Mr. Nutter

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EXHIBITSApplicant's Exhibits
1 and 2MARKED

2

ADMITTED IN
EVIDENCE

6

STATE OF NEW MEXICO)
) SS.
COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.

Samuel A. Abbott

I do hereby certify that the foregoing is
a true and correct copy of the proceedings in
this case. 6/4 19 69
[Signature], Examiner
New Mexico Oil Conservation Commission

dearley-meier

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

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



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION

Santa Fe, New Mexico

April 9, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of BTA Oil
Producers for salt water
disposal, Lea County,
New Mexico.

Case 4093

BEFORE: DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: Case 4093, application of BTA Oil Producers for salt water disposal, Lea County, New Mexico.

MR. KELLAHIN: Jason Kellahin, Kellahin & Fox, appearing for the Applicant. I have one witness.

(Thereupon, Applicant's Exhibit 1 through 7 were marked for identification.)

JERRY MORITZ

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q State your name please?

A Jerry Mortiz.

Q By whom are you employed, and in what position?

A I am with the BTA Oil Producers, and I am a Reservoir Engineer in Midland, Texas.

Q Have you testified before the Oil Conservation Commission, and made your qualification as a Reservoir Engineer a matter of record?

A Yes.

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

MR. NUTTER: They are.

Q Mr. Moritz, are you familiar with the application of BTA in Case 4093 presently before the Examiner?

A Yes.

Q What is proposed by BTA in this application?

A BTA is requesting that they be allowed to dispose of Bough C produced water into two Devonian dryholes in the vicinity of the West Crossroads-Devonian Pool.

Q Referring to what has already been marked as Applicant's Exhibit 1, would you identify that exhibit?

A Exhibit 1 is an area plot of West Crossroads-Devonian Pool. This plat shows the ownership in the area, and the location of all wells. The wells that have produced are shown with a colored dot, red being for the Devonian, green for the Bough C Pennsylvanian, and the blue for the San Andres.

Also shown is BTA Geological interpretation of the Devonian structure for this pool. The original oil-water content is shown at a minus 7,950.

Union Oil of California has two salt water disposal wells that are injecting produced water into the Devonian into this pool. They are shown as solid red triangles. Their State Lea H No. 1, located in Unit L of Section 32, 9-36, approved by Administrative Order SWD-52 on May 28, 1965; and their Federal G No. 1, located in Unit G, Section 31, 9-36, was approved by Order R-3210 on March 22, 1967. The H No. 1 has been used to reinject 4,193,206 barrels of salt water; and the G No. 1, 1,609,610 barrels of salt water, for a total of 5,702,916 barrels of water, to 1-1-69. Injection is still on a vacuum.

The two wells that BTA plans to utilize for injection are the Pray No. 1 in F of Section 5, 10-36, and the Pray No. 2 in C, Section 5, 10-36, both of which are shown by dashed red triangles. These two wells are located 222 feet and 83 feet below the original oil water contact, respectively.

Q The two Union wells, they are injecting into the same Devonian formation?

A Yes.

Q That is the same formation you propose to inject into?

A Yes.

Q Referring to Exhibit 2, would you identify that exhibit?

A Exhibit 2 is a plat of the oil and water production from the west Crossroad-Devonian pool from discovery in October, 1959 to 1-1-69. Gas production is not shown since it has been a fairly negligible amount.

Total production from this pool has been 1,465,290 barrels of oil, and 7,197,487 barrels of water, to 1-1-69, for a total fluid production of 8,663,770 barrels of fluid.

As previously stated, reinjected volume has been 5,702,000, approximately.

Q Now, the water production began quickly after this pool was discovered?

A That's correct. And from the data that we can see, it is indicating that this Devonian reservoir is under an active water drive, and the oil-water contact has steadily moved updip. By 1968, the pool was producing at a 90 percent watercut, with all wells making large volumes of wwater.

The highest well on the structure, the D No. 1, located in P of section 31, produced 9,328 barrels of oil, plus 121,500 barrels of water, for a 93 percent watercut. This is in December of 1968.

Q Referring to what has been marked as Exhibits 3 and 4, would you identify those exhibits?

A Exhibits 3 and 4 are well bore schematics of the two wells that BTA proposes to use for injection of produced water into the Devonian.

Exhibit No. 3 shows that BTA plans in the No. 1 Pray to set 5 1/2 inch casing at 12,233, with 500 sacks. Estimated top of the cement will be at 9,330. Injection will be down 2 7/8 inch internally plastic coated tubing set on a packer at 12,000 feet.

The annulus will be filled with a corrosion inhibited fluid, and the surface valve will be left open to detect any communication by the packer.

The various formations encountered in this area are shown. All formations will be protected by casing, or casing and cement. Initial injecting will be at the rate of 10,000 barrels of water per day on vacuum in this well.

As volumes to be injected increase, BTA plans to reenter the Pray No. 2 and complete it in a manner similar to this well.

And Exhibit 4 is the plan for the Pray No. 2.

Q Again, you will use an internally coated tubing, and the tubing annulus will be filled with an inert fluid?

A Yes.

Q And you will leave the casing tubing annulus open at the surface?

A Yes.

Q Do you anticipate both wells will take the water on a vacuum?

A Yes.

Q Now, referring to what has been marked as Exhibit No. 5, would you identify that, please.

A Exhibit 5 is a water analysis of a typical Bough C water produced in the area that we are planning to bring the water from. This shows that this water has a too high water salt content to be fit for domestic use.

Q What is the source of the water you will

inject into these two disposal wells?

A It is our leases in the Township to the North that are completed in the Bough C formation.

MR. NUTTER: What pool would that be in?

THE WITNESS: Mainly it is the Middle Allison. We do have a few undesignated extensions.

MR. NUTTER: Approximately how far away are these wells that are producing water?

THE WITNESS: About 5 1/2 miles to the North.

Q Now, referring to what has been marked as Exhibit No. 6, would you identify that exhibit?

A Exhibit 6 is a reproduced copy of the log run on the Max Pray State E No. 2, which we are calling the Pray No. 2. The various formations encountered are marked along with the total depth. The setting of the casing point, and the location of the packer are shown there in a small schematic, with the top of the Devonian marked.

Q Referring to what has been marked as Exhibit 7 would you identify that Exhibit?

A Exhibit 7 is a letter that we have received from Union Oil of California, which is the only other

operator in the West Crossroads-Devonian Pool, stating that they are not opposed to our application for salt water disposal under Case 4093.

Q Mr. Moritz, from your knowledge of the West Crossroads-Devonian pool, do you believe that the granting of this application will prevent waste?

A Yes, I do.

Q Will the correlative rights of the operators in the area be impaired in any way?

A No. I might make a comment regarding this. We presently have 16 wells shut in in the Middle Allison pool which would produce 3,200 barrels a day, if we had some place for the water.

MR. NUTTER: 3,200 of oil?

THE WITNESS: Yes, 3,200 barrels of oil.

MR. NUTTER: That would be 200 apiece then?

THE WITNESS: Yes.

Q (By Mr. Kellahin) In other words, you would like to get this salt water disposal system into operation as soon as possible, is that correct?

A Yes.

Q Were Exhibits 1 through 7 prepared by you or

under your supervision?

A Yes.

MR. KELLAHIN: At this time, I will offer Exhibits 1 through 7.

MR. NUTTER: Applicant's Exhibits 1 through 7 will be admitted into evidence.

MR. KELLAHIN: That is all I have under direct examination.

(Thereupon, Applicant's Exhibits 1 through 7 were admitted in evidence.)

CROSS EXAMINATION

BY MR. NUTTER:

Q Apparently, from your map there are three wells presently producing from the Devonian in the pool. Is that correct?

A No, two wells. The one is shown as TD SWD No. 52.

Q That would be in Unit J of 31?

A Yes, is shut in. And the one in A of 6 is shut in, also.

Q Only the discovery well there is the only one

producing?

A Yes, and it is producing with a subsersible pump.

Q And Union is disposing of the water produced from that well in the disposal well up here in Unit G of 31?

A Yes, plus the one in L of 32.

Q They are using both of them?

A Yes, they are. They are just about splitting it in half.

Q Do you anticipate that -- you mentioned that the first well would take 10,000 barrels a day on a vacuum, you thought?

A Yes.

Q Do you anticipate the other well would take a similar volume?

A Yes, we actually anticipate that they may take more than this.

Q What is your current rate of water production in this area to the North? What would it be if you are producing?

A It would be about 25,000 barrels a day.

Q And you anticipate, then, you are hoping that both of these wells would take that volume of water?

A Yes. We also have plans in the area to take some in of the other operators that are up in our area.

Q It was my understanding the other day that BTA had been attempting to enter some Devonian well for disposal purposes, and was having trouble getting water into that well. Was that one of these?

A No, this was a well located in Section 6 of 9-36 which is not shown on this map. This map, by the way, does show the leases that will be involved in our salt water disposal that we operate.

Q That is the area that is 5 1/2 miles north, then?

A Right, the 80 acre lease is marked down at the bottom.

Q Where was that disposal well that you were attempting to complete?

A It is in Unit J of Section 6, 9-36. It is shown as the Harris No. 2. We deepened it on to 13,907 feet, and it was a dry hole. We were unable to inject into it.

Q But you anticipate higher permeabilities and porosity down here in this area?

A Right, we sure do.

MR. NUTTER: Do you want to offer this one as an Exhibit, too, since we made reference to it?

(Thereupon, Applicant's Exhibit No. 8 was marked for identification.)

MR. NUTTER: Applicant's Exhibit 8 will be admitted into evidence.

(Thereupon, Applicant's Exhibit No. 8 was admitted in evidence.)

Does anyone have any questions of Mr. Moritz?
You may be excused. Do you have anything further?

MR. KELLAHIN: That is all.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4093? We will take the case under advisement, and call Case 4094.

I N D E XWITNESSPAGE

JERRY MORITZ

Direct Examination by Mr. Kellahin

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Cross Examination by Mr. Nutter

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EXHIBITSMARKEDADMITTED IN
EVIDENCEApplicant's Exhibits
1 through 7

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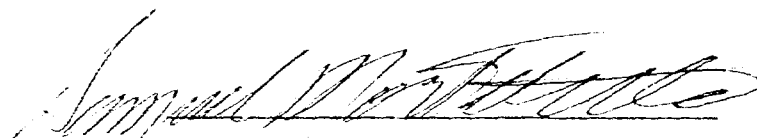
Applicant's Exhibit
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STATE OF NEW MEXICO)
) ss.
COUNTY OF BERNALILLO)

I, SAMUEL MORTELETTE, Court Reporter 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.



I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner Hearing of Case No. 4093
heard by me on 4/9, 1969.


New Mexico Oil Conservation Commission



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87501

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMIJO
MEMBER

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

June 10, 1969

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

Re: Case No. 4093
Order No. R-3727-A
Applicant:
BTA Oil Producers

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/ir

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. 4093
Order No. R-3727-A

APPLICATION OF BTA OIL PRODUCERS
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 June 4, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Mutter.

NOW, on this 10th day of June, 1969, 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 by Order No. R-3727, dated April 15, 1969, the
applicant, BTA Oil Producers, was granted authority to dispose
of produced salt water into the Devonian formation in the open-
hole intervals from approximately 12,233 feet to 12,275 feet
and 12,088 feet to 12,164 feet, respectively, in its Max Pray
State "E" Wells Nos. 1 and 2, located, respectively, in Units F
and C of Section 5, Township 10 South, Range 36 East, NMPM,
adjacent to the West Crossroads-Devonian Pool, Lea County, New
Mexico.

(3) That the applicant seeks the amendment of said Order
No. R-3727, as amended, to permit injection into the open-hole
intervals from approximately 12,305 feet to 12,500 feet in said
Well No. 1 and from 12,154 feet to 12,502 feet in said Well No. 2
in lieu of the injection intervals authorized by said Order No.
R-3727.

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CASE No. 4093

Order No. R-3727-A

(4) 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 Order (1) of Order No. R-3727 is hereby amended to read in its entirety as follows:

"(1) That the applicant, BTA Oil Producers, is hereby authorized to utilize its following-described wells in Section 5, Township 10 South, Range 36 East, NMPM, adjacent to the West Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation:

Max Pray State "E" Well No. 1, located in Unit F, injection to be accomplished through 3 1/2-inch tubing installed in a packer set at approximately 11,800 feet, with injection into the open-hole interval from approximately 12,305 feet to 12,500 feet, and

Max Pray State "E" Well No. 2, located in Unit C, injection to be accomplished through 3 1/2-inch tubing installed in a packer set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,154 feet to 12,502 feet;

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

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

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



STATE OF NEW-MEXICO
OIL CONSERVATION COMMISSION

David F. Cargo
DAVID F. CARGO, Chairman

Alex J. Armijo
ALEX J. ARMILLO, Member

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



CARLTON BEAL
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701

AC 915-662-3753

JUN 12 PM 12 59

June 3, 1969

In re: Waiver of Objection to Water Disposal Well
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Midwest Oil Corporation, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Midwest Oil Corporation hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,


For Midwest Oil Corporation



BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701

AC 915-682-3753

June 3, 1969

MAILED
JUN 12 PM 12 58

In re: Salt Water Disposal.
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.


Dear Sir:

BTA Oil Producers is hereby applying for the administrative approval to dispose of water in the Devonian zone of its Pray #1 SWD located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

We anticipate disposing of from 5,000 to 15,000 barrels of producing Pennsylvania Bough "C" water per day into the Devonian formation at a depth of approximately 12,305' to 12,500', with a surface pressure of approximately 150 to 1100 psi.

The enclosed data is submitted in support of this application.

Yours very truly,


T. L. ALVEY
For BTA Oil Producers

TLA:bl

Enc. NMOCC Form C-108
Log
Well Bore Sketch
Plat of Area

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR BTA Oil Producers		ADDRESS 104 So. Pecos, Midland, Texas 79701	
LEASE NAME Pray #1 SWD	WELL NO. 1	FIELD -	COUNTY Lea
LOCATION UNIT LETTER F ; WELL IS LOCATED 1980 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 5 TOWNSHIP 10-S RANGE 36-E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	13-3/8"	345'	275
INTERMEDIATE	8-5/8"	4130'	500
LONG STRING	5-1/2"	12095'	300
TUBING	3-1/2"	11800	NAME, MODEL AND DEPTH OF TUBING PACKER Arrow SC-2 11,800'
NAME OF PROPOSED INJECTION FORMATION Devonian		TOP OF FORMATION 12,233'	BOTTOM OF FORMATION 12,500'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? OH	PROPOSED INTERVAL(S) OF INJECTION 12,305' to 12,500'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil Well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH -			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 12,023'	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 5,000	MINIMUM 15,000	MAXIMUM 15,000	OPEN OR CLOSED TYPE SYSTEM? Closed
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - high salinity		WATER TO BE DISPOSED OF Penn	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Pressure
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mrs. M. Price, Mr. T. Price, Mrs. R. Baum, Mrs. G. A. Duncan, Mrs. L. B. Gainer.		NATURAL WATER IN DISPOSAL ZONE -	APPROX. PRESSURE (PSI) 150 - 1100
ARE WATER ANALYSES ATTACHED? Yes			
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL			
Union Oil Co. of California, 500 N. Marienfeld, Midland, Texas 79701			
Phillips Petroleum Co., Box 3120, Midland, Texas 79701			
Midwest Oil Corporation, 1500 Wilco Bldg., Midland, Texas 79701			
Humble Oil & Refining Co., P. O. Box 1600, Midland, Texas 79701			
NOTE* Approval granted per NMOCC Order #R-3727 dated 4-15-69.			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER Yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?	PLAT OF AREA Yes	ELECTRICAL LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Drilling Manager

June 3, 1969

(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.

[illegible]



CARLTON BEAL
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701

AC 915-682-3753

MAILED
JUN 12 AM 8 14
1969

June 3, 1969

In re: Waiver of Objection to Water Disposal Well
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Union Oil Company, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #2 SWD well located 660' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Union Oil Company hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

For Union Oil Company of California
June 10, 1969



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

P. O. BOX 2088 - SANTA FE

87801

GOVERNOR
DAVID F. CARGO
CHAIRMAN

LAND COMMISSIONER
ALEX J. ARMijo
MEMBER

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

April 15, 1969

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

Re: Case No. 4093
Order No. R-3727
Applicant:
BTA OIL PRODUCERS

DOCKET MARK

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/ir

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. 4093
Order No. R-3727

APPLICATION OF BTA OIL PRODUCERS
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 April 9, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 15th day of April, 1969, 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, BTA Oil Producers, is the owner and
operator of the Max Pray State "E" Well No. 1 and the Max Pray
State "E" Well No. 2, located in Units F and C, respectively, of
Section 5, Township 10 South, Range 36 East, NMPM, adjacent to
the West Crossroads-Devonian Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said wells to
dispose of produced salt water into the Devonian formation, with
injection into the intervals as follows:

The open-hole interval from approximately 12,233
feet to 12,275 feet in its Max Pray State "E" Well
No. 1, and

The open-hole interval from approximately 12,088
feet to 12,164 feet in its Max Pray State "E" Well
No. 2.

-2-

CASE No. 4093

Order No. R-3727

(4) That the injection should be accomplished through:

2 7/8-inch plastic-lined tubing installed in a packer set at approximately 12,000 feet in the Max Pray State "E" Well No. 1, and

2 7/8-inch plastic-lined tubing installed in a packer set at approximately 12,000 feet in the State "E" Well No. 2;

that the casing-tubing annulus of each of the subject wells should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus of each of the subject wells 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, BTA Oil Producers, is hereby authorized to utilize its following-described wells in Section 5, Township 10 South, Range 36 East, NMPM, adjacent to the West Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation:

Max Pray State "E" Well No. 1, located in Unit F, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,233 feet to 12,275 feet, and

Max Pray State "E" Well No. 2, located in Unit C, injection to be accomplished through 2 7/8-inch tubing installed in a packer set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,088 feet to 12,164 feet;

PROVIDED HOWEVER, that the tubing of each of the subject wells shall be plastic-lined; that the casing-tubing annulus of each of the subject wells shall be filled with an inert fluid;

-3-

CASE No. 4093

Order No. R-3727

and that a pressure gauge shall be attached to the annulus of each of the subject wells 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.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMIJO, Member


A. L. PORTER, Jr. Member & Secretary


esr/

Docket No. 16-69

DOCKET: EXAMINER HEARING - WEDNESDAY - JUNE 4, 1969

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 4121: (Continued from the May 7, 1969, Examiner Hearing)
Application of Roger C. Hanks for special pool rules, Lea County,
New Mexico. Applicant, in the above-styled cause, seeks the
promulgation of special pool rules for the Bar U-Pennsylvanian
Pool, Lea County, New Mexico, including a provision for 160-
acre spacing and proration units and the assignment of 80-acre
allowables.

CASE 4143: (Continued from the May 21, 1969, Examiner Hearing)
Application of Amerada Petroleum Corporation for downhole
commingling and special gas-oil ratio limitation, Lea County,
New Mexico. Applicant, in the above-styled cause, seeks
authority to commingle production from the Eumont Gas Pool and
the Skaggs-Grayburg Pool in the wellbore of its Fred Turner,
Jr., "A" Well No. 2, the Eumont completion of which is presently
classified as a gas completion, located in Unit K of Section 18,
Township 20 South, Range 38 East, Lea County, New Mexico. Appli-
cant, further seeks the establishment of a special gas-oil ratio
limitation for the subject well.

CASE 3796: (Reopened)
In the matter of Case No. 3796 being reopened pursuant to the
provisions of Order No. R-3452, which order established 160-
acre spacing units for the Cerca-Upper Pennsylvanian Pool, Lea
County, New Mexico, for a period of one year. All interested
parties may appear and show cause why said pool should not be
developed on 40-acre or 80-acre spacing units.

CASE 4093: (Reopened)
Application of BTA Oil Producers for salt water disposal, Lea
County, New Mexico. Order No. R-3727, dated April 15, 1969,
authorized the applicant to dispose of produced salt water into
the Devonian formation in the intervals from approximately
12,233 feet to 12,275 feet in its Max Pray State "E" Well No. 1
and from approximately 12,088 to 12,164 feet in its Max Pray
State "E" Well No. 2 located, respectively, in Units F and C of
Section 5, Township 10 South, Range 36 East, adjacent to the
West Crossroads-Devonian Pool, Lea County, New Mexico. Applicant
now seeks authority to extend said Devonian zones of disposal
to 12,233 feet to 12,500 feet in said Well No. 1 and 12,088
feet to such depth as is necessary in said Well No. 2.

CASE 4144: Application of Sam G. Dunn Oil Operations for salt water disposal, Chaves 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 1910 feet to 1950 feet in its E. Faircloth "C" Well No. 1 located in Unit N of Section 32, Township 7 South, Range 27 East, A me-San Andres Pool, Chaves County, New Mexico.

CASE 4143: (Continued and readvertised)

Application of Mallard Petroleum 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 formation in the perforated interval from approximately 3000 feet to 3100 feet in the Miller Federal Well No. 4, located in Unit C of the Seven Rivers Pool, Township 20 South, Range 34 East, Lynch (Water) Pool, Lea County, New Mexico.

CASE 4145: Application of Tennessee Oil Company for an exception to Order No. R-3221, as amended, Lea and Eddy Counties, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's field leases comprising the SW/4 NW/4 of Section 12, Township 17 South, Range 32 East, Lea County, New Mexico, and the NE/4 of Section 28, Township 19 South, Range 31 East, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed on said leases in unlined surface pits on said leases.

CASE 4146: Application of V. S. Welch for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for the applicants lease comprising the NE/4 of Section 28, Township 18 South, Range 31 East, Shugart Field, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells completed or to be completed on said lease in unlined surface pits on said lease.

CASE 4147: Application of Mobil Oil Corporation for pool reclassification, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have the North Vacuum-Morrow Pool, Lea County, New Mexico, reclassified from an oil pool to a gas pool.

CASE 4148: Application of Fannie Lee Mitchell, 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 Wolfcamp formation in the perforated interval from approximately 10,450 feet to 10,550 feet in the former Southern Petroleum Exploration Co., Inc. Machris State 36-3 Well No. 1 located in Unit W of Section 3, Township 16 South, Range 35 East, Townsend-Wolfcamp Pool, Lea County, New Mexico.

CASE 4149: Application of Jack L. McClellan for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's Harris Well No. 1 located in Unit P, Section 5, Township 16 South, Range 30 East, West Henshaw-Grayburg Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in unlined surface pits in the vicinity of the well.

DOCKET: EXAMINER HEARING - WEDNESDAY - APRIL 9, 1969

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 4092: Application of Phillips Petroleum Company for a capacity allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the assignment of a capacity allowable to its U. S. Minerals Well No. 4 located in the SW/4 SE/4 of Section 30, Township 17 South, Range 33 East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico. Said well offsets a waterflood project operated by Cities Service Oil Company.
- CASE 4093: Application of BTA Oil Producers 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 intervals from approximately 12,240 feet to 12,275 feet in its State "E" Well No. 1 and from approximately 12,088 feet to 12,164 feet in its State "E" Well No. 2 located, respectively, in Units F and C of Section 5, Township 10 South, Range 36 East, adjacent to the West Crossroads-Devonian Pool, Lea County, New Mexico.
- CASE 4094: Application of Cayman Corporation 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 4184 feet to 4274 feet in its Hondo-State Well No. 1 located in Unit F of Section 31, Township 7 South, Range 33 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.
- CASE 4095: Application of Tom Schneider for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Rustler formation in the perforated interval from approximately 1320 feet to 1340 feet in his SWD Well No. 1 located in Unit O of Section 16, Township 23 South, Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.
- CASE 4096: Application of Kersey & Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project

(Case 4096 continued)

by the injection of water into the Seven Rivers formation through four wells located in Units C, D, and F of Section 25, Township 17 South, Range 28 East, Aid (Yates-Seven Rivers) Pool, Eddy County, New Mexico.

CASE 4097: Application of Western States Producing Company for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Smelting-State Well No. 1, located in Unit F of Section 9, Township 12 South, Range 34 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the East Bagley-Pennsylvanian Pool and the disposal of produced salt water through the intermediate casing-production casing annulus into the San Andres, Glorieta, Tubb, Abo, and possibly other formations in the interval from approximately 4199 feet to 8931 feet.

CASE 4098: In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Walter J. Nelson and all other interested parties to appear and show cause why the Walter J. Nelson Lee Burns "A" Well No. 1 located in Unit P of Section 31, Township 6 North, Range 8 East, Torrance County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4078: (Continued from the March 26, 1969 Examiner Hearing)
Application of J. Gregory Merrion for downhole commingling, Rio Arriba County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Devils Fork-Gallup Pool and an undesignated Mesaverde oil pool in the well-bore of his NCRA State Well No. 3 located in Unit L of Section 16, Township 24 North, Range 6 West, Rio Arriba County, New Mexico.



BTA OIL PRODUCERS
104 SOUTH PECOS
MIDLAND, TEXAS 79701
AC 915-632-3753

MAILED
JUN 16 AM 8 42

June 3, 1969

In re: Waiver of Objection to Water Disposal Well
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

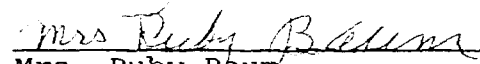
Please be advised that we (Mrs. Mattie Price, Mr. Tommy Price, Mrs. Ruby Baum, Mrs. Georgie Ann Duncan, and Mrs. Lela Belle Gainer, surface owners of Section 5, T-10-S, R-36-E, Lea County, New Mexico) have been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.


We hereby waive all objections to granting approval of BTA Oil Producers' application.

Very truly yours,


Mrs. Mattie Price


Mr. Tommy Price


Mrs. Ruby Baum


Mrs. Georgie Ann Duncan


Mrs. Lela Belle Gainer



BTA OIL PRODUCERS
104 SOUTH PECOS
MIDLAND, TEXAS 79701
AC 915-682-3753

1969 JUN 15 AM 8 42

June 3, 1969

In re: Waiver of Objection to Water Disposal Well
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

Please be advised that we (Mrs. Mattie Price, Mr. Tommy Price, Mrs. Ruby Baum, Mrs. Georgie Ann Duncan, and Mrs. Lela Belle Gainer, surface owners of Section 5, T-10-S, R-36-E, Lea County, New Mexico) have been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #2 SWD well located 660' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

We hereby waive all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

Mrs. Mattie Price
Mrs. Mattie Price

Mr. Tommy Price
Mr. Tommy Price

Mrs. Ruby Baum
Mrs. Ruby Baum

Mrs. Georgie Ann Duncan
Mrs. Georgie Ann Duncan

Mrs. Lela Belle Gainer
Mrs. Lela Belle Gainer



CARLTON BEAL
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701

AC 915-682-3753

21 JUN 18 PM 1 12 '69

June 3, 1969

In re: Waiver of Objection to Water Disposal Well
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Phillips Petroleum Company, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #2 SWD well located 660' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Phillips Petroleum Company hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,


For Phillips Petroleum Co.



CARLTON BEAL
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701
AC 915-682-3753

June 3, 1969

MAILED
'69 JUN 13 PM 1 12

In re: Salt Water Disposal
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.


Dear Sir:

BTA Oil Producers is hereby applying for the administrative approval to dispose of water in the Devonian zone of its Pray #2 SWD well located 660' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

We anticipate disposing of from 4,000 to 15,000 barrels of producing Pennsylvania Bough "C" water per day into the Devonian formation at a depth of approximately 12,154' to 12,502', with a surface pressure of approximately 150 to 1400 psi.

The enclosed data is submitted in support of this application.

Yours very truly,


T. L. ALVEY
For BTA Oil Producers

TLA:bl

Enc. NMOCC Form C-108
Log
Well Bore Sketch
Plat of Area

NEW MEXICO OIL CONSERVATION COMMISSION
APPLICATION TO DISPOSE OF SALT WATER BY INJECTION INTO A POROUS FORMATION

OPERATOR BTA Oil Producers		ADDRESS 104 So. Pecos, Midland, Texas 79701	
LEASE NAME Pray #2 SWD	WELL NO. 2	FIELD -	COUNTY Lea
LOCATION UNIT LETTER C WELL IS LOCATED 660 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 5 TOWNSHIP 10-S RANGE 36-E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	13-3/8"	332'	275
INTERMEDIATE	8-5/8"	4135'	500
LONG STRING	5-1/2"	12,154'	300
TUBING	3-1/2"	12,000'	NAME, MODEL AND DEPTH OF TUBING PACKER Arrow SC-2 @ 12,000'
NAME OF PROPOSED INJECTION FORMATION Devonian		TOP OF FORMATION 12,088'	BOTTOM OF FORMATION 12,502'
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? O.H.	PROPOSED INTERVAL(S) OF INJECTION 12,154' to 12,502'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	I. ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil Well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH -			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 12,023'	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None
ANTICIPATED DAILY INJECTION VOLUME (BBLs.) 4,000	MINIMUM 15,000	MAXIMUM Closed	OPEN OR CLOSED TYPE SYSTEM Pressure
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - Penn		WATER TO BE DISPOSED OF -	NATURAL WATER IN DISPOSAL ZONE Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mrs. M. Price, Mr. T. Price, Mrs. R. Baum, Mrs. G. A. Duncan, Mrs. L. B. Gainer.			
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL			
Union Oil Co. of California, 500 N. Marienfeld, Midland, Texas 79701			
Phillips Petroleum Co., P. O. Box 3120, Midland, Texas 79701			
Midwest Oil Corporation, 1500 Wilco Bldg., Midland, Texas 79701			
Humble Oil & Refining Co., Box 1600, Midland, Texas 79701			
Note* Approval granted per NMOCC Order #R-3727 dated 4-15-69.			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER Yes	EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)?	PLAY OF AREA Yes	ELECTRIC LOG Yes	DIAGRAMMATIC SKETCH OF WELL Yes

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

Drilling Manager

June 3, 1969

(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.

BTA OIL PRODUCERS

Pray No 1

1980 FNL & 1980 FWL Sec. 5, T-10-S, R-36-E
LEA COUNTY, NEW MEXICO

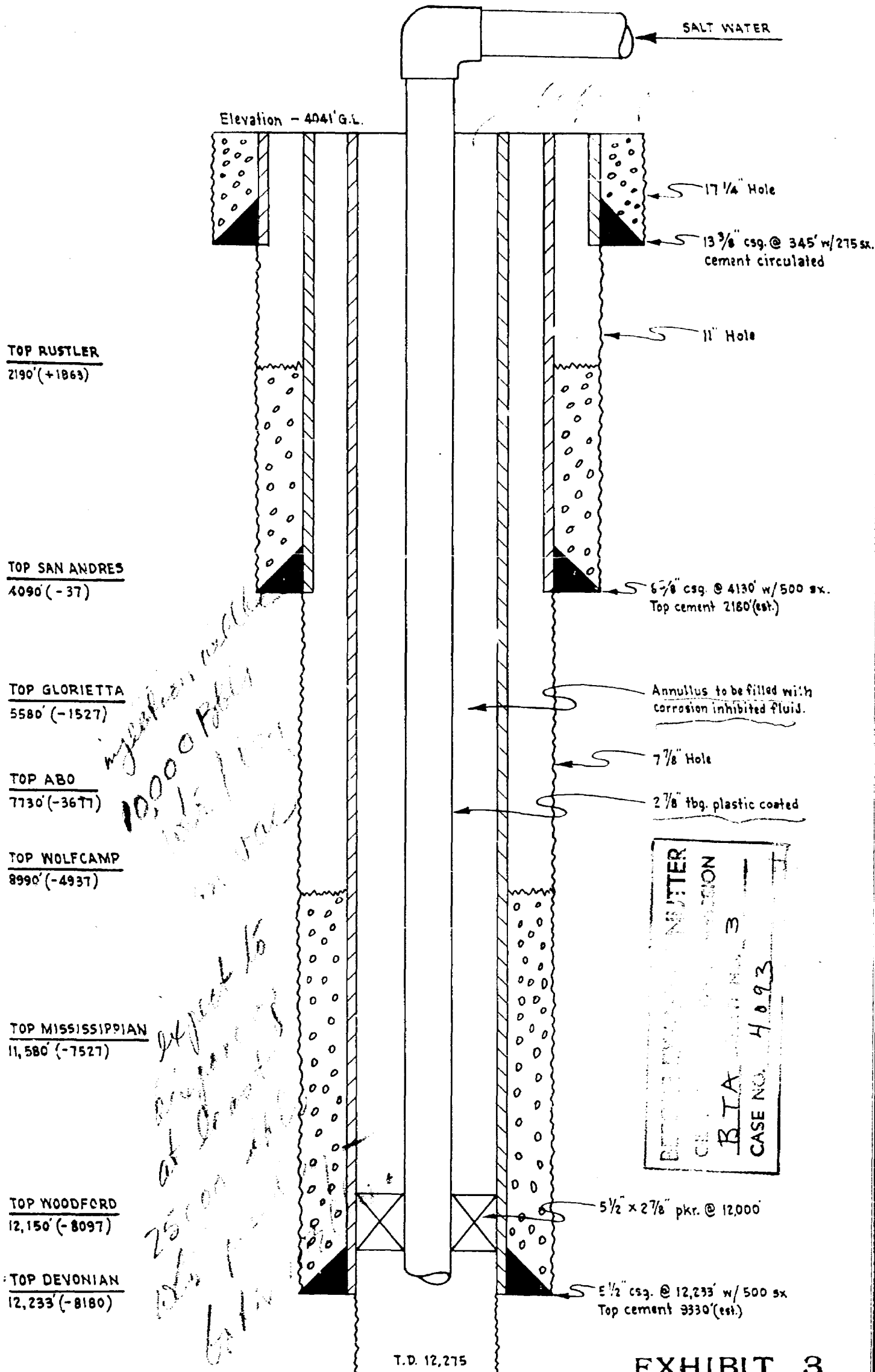


EXHIBIT 3

BTA OIL PRODUCERS

Pray No 2

660' FNL & 1980' FWL Sec. 5, T-10-S, R-36-E
LEA COUNTY, NEW MEXICO

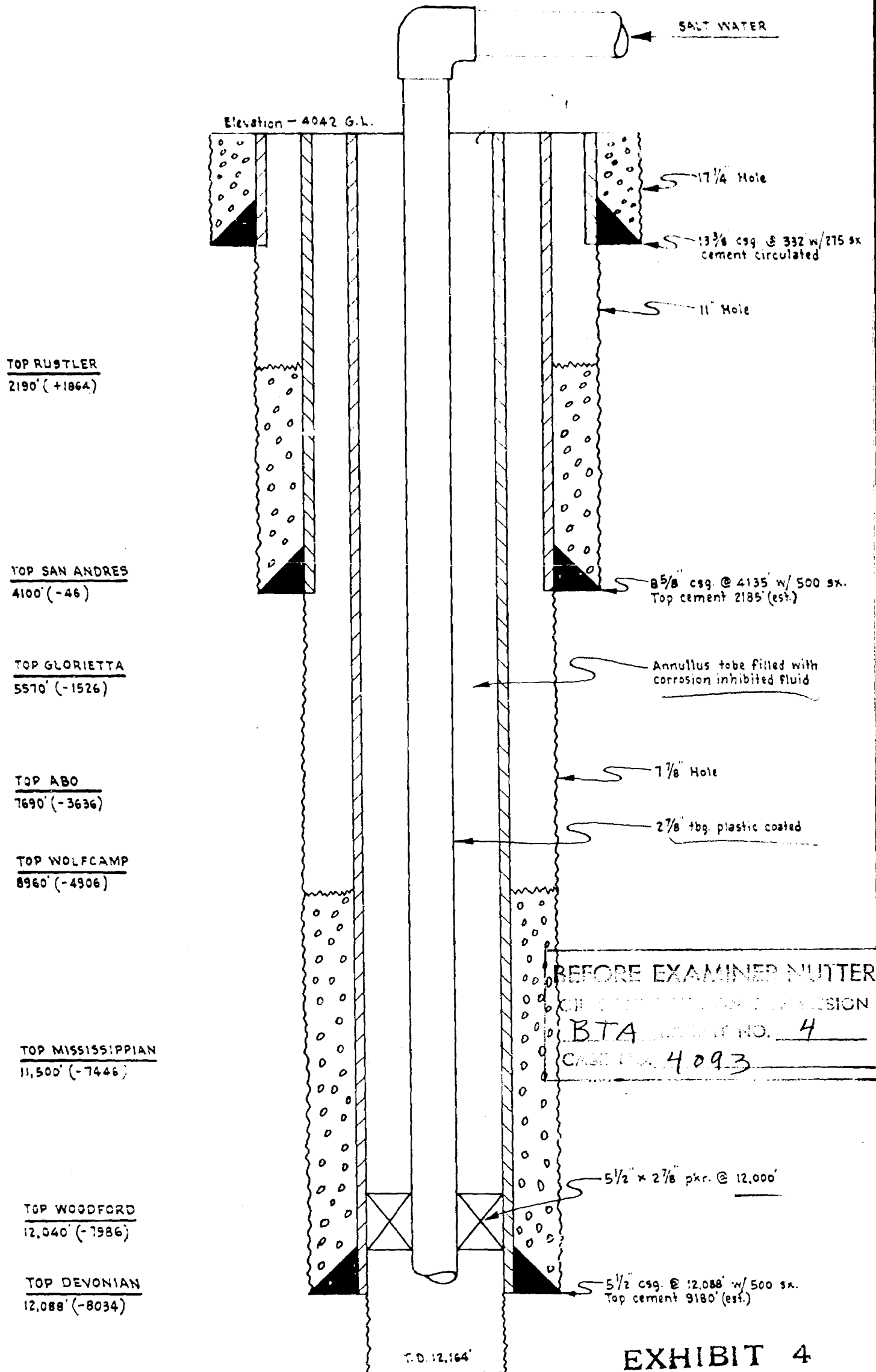


EXHIBIT 4

Case No. 4093
BTA Oil Producers

WATER ANALYSIS

Middle Allison - Produced Water

Lea County, N. M.

	<u>PPM</u>
Calcium	5440
Magnesium	1075
Sodium	33560
Iron	59
Sulphate	568
Chloride	64000
Bicarbonate	183
Carbonate	None
Hydroxide	None
Specific Gravity	1.060 @ 68°F.
PH	6.6

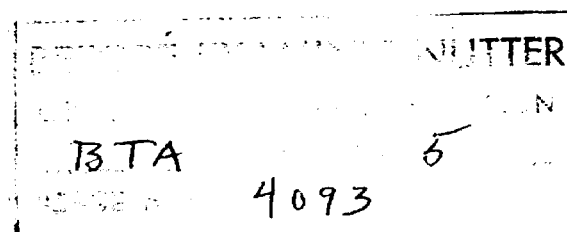


EXHIBIT 5

Union Oil Company of California

619 West Texas Avenue, Midland, Texas 79701
Telephone (915) MU 4-8231



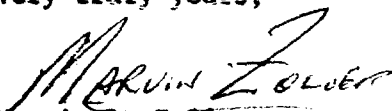
April 3, 1969

Mr. R. L. Halvorsen
BTA Oil Producers
104 South Pecos
Midland, Texas 79701

Dear Mr. Halvorsen:

This is to inform you that the Union Oil Company of California,
an operator in the West Crossroads Devonian Field, Lea County,
New Mexico, is not opposed to your application for salt water
disposal under Case #4093.

Very truly yours,


Marvin L. Zoller
Regional Development Geologist

MLZ:sk

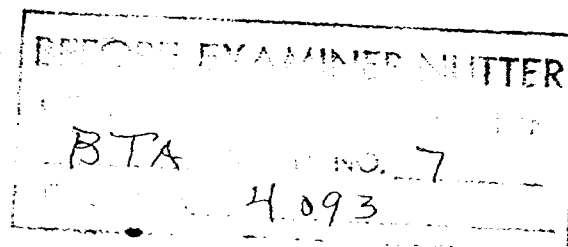
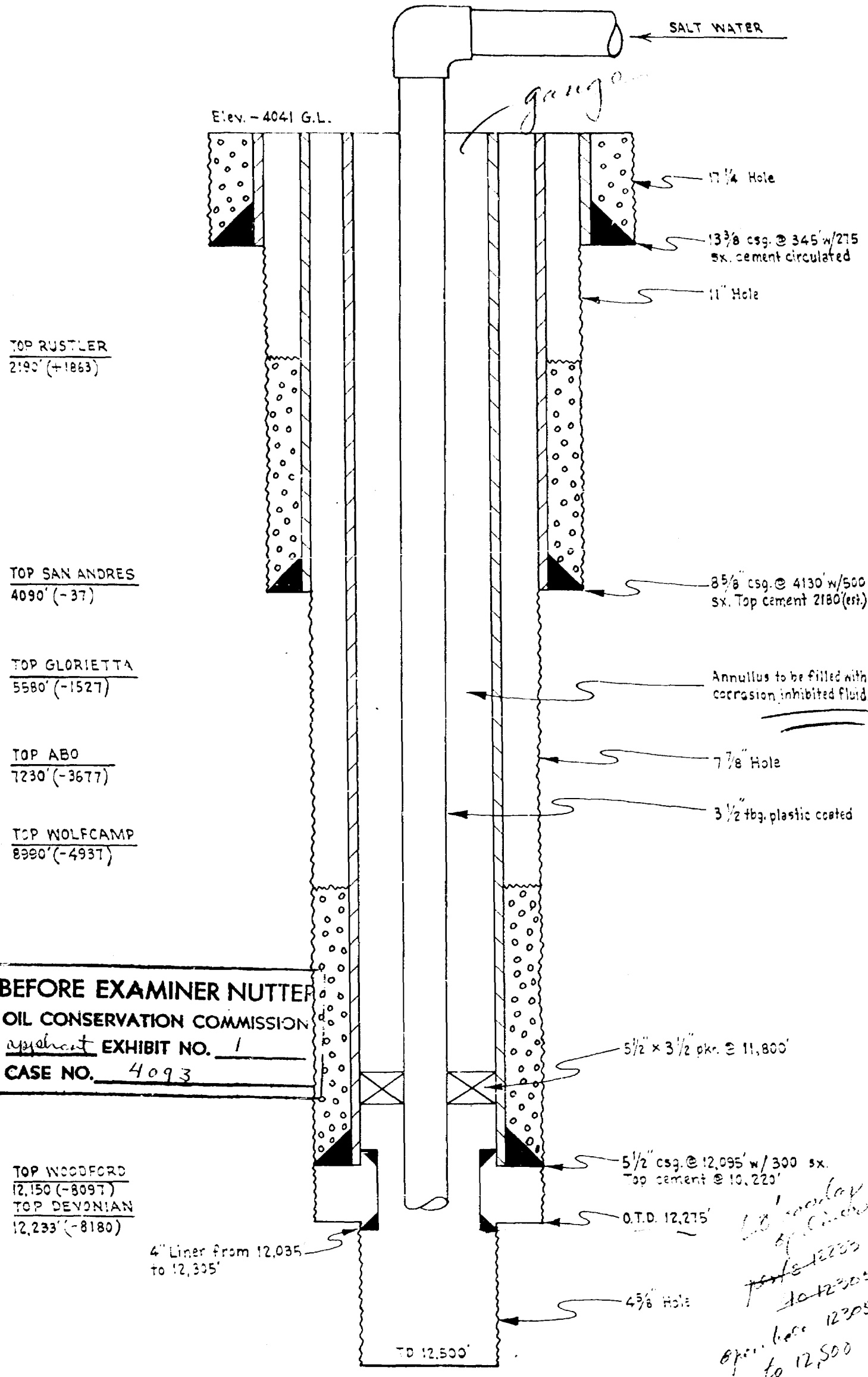


EXHIBIT 7

BTA OIL PRODUCERS

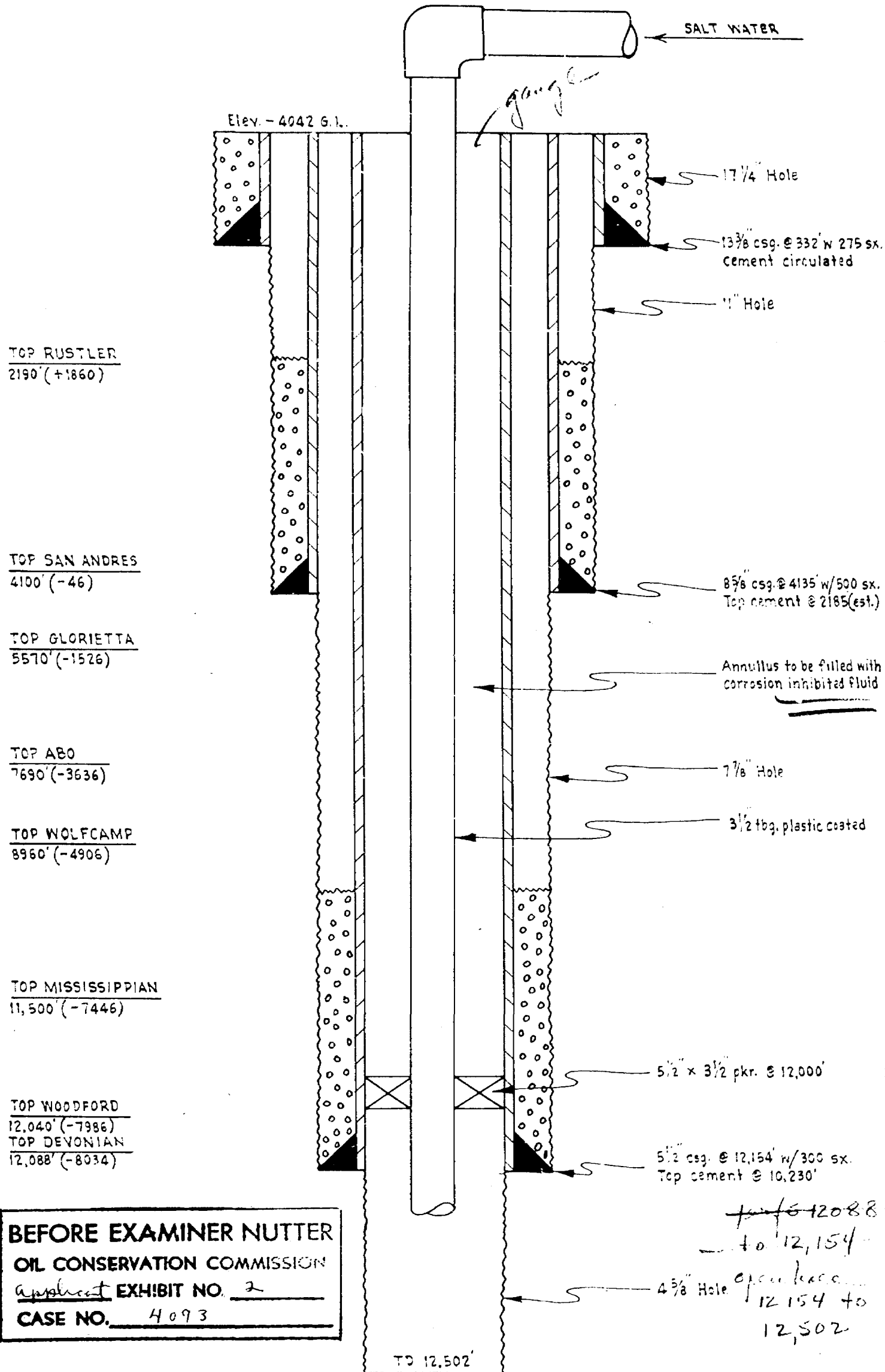
PRAY No 1
1980 FNL & 1980 FWL of Sec 5, T-10-S, R-36-E
Lea County, New Mexico



BTA OIL PRODUCERS

PRAY No 2

660' FNL & 1980' FIVL of Sec. 5, T-10-S, R-36-E
Dea County, New Mexico





CARLTON BEAL
SOLE OWNER

000 33
BTA OIL PRODUCERS

104 SOUTH PECOS
MIDLAND, TEXAS 79701

AG 015-682-3703
5
3

June 3, 1969

In re: Salt Water Disposal.
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

BTA Oil Producers is hereby applying for the administrative approval to dispose of water in the Devonian zone of its Pray #1 SWD located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

We anticipate disposing of from 5,000 to 15,000 barrels of producing Pennsylvania Bough "C" water per day into the Devonian formation at a depth of approximately 12,305' to 12,500', with a surface pressure of approximately 150 to 1100 psi.

The enclosed data is submitted in support of this application.

Yours very truly,


T. L. ALVEY
For BTA Oil Producers

TLA:bl

Enc. NMOCC Form C-108
Log
Well Bore Sketch
Plat of Area

*See Note

Form C-108
Revised 1-1-65

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR BTA Oil Producers		ADDRESS 104 So. Pecos, Midland, Texas 79701			
LEASE NAME Pray #1 SWD	WELL NO. 1	FIELD -	COUNTY Lea		
LOCATION UNIT LETTER F ; WELL IS LOCATED 1980 FEET FROM THE North LINE AND 1980 FEET FROM THE West LINE, SECTION 5 TOWNSHIP 10-S RANGE 36-E NMPM.					
CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	13-3/8"	345'	275	surface	circulated
INTERMEDIATE	8-5/8"	4130'	500	2180'	Est.
LONG STRING	5-1/2"	12095'	300	10220'	Est.
TUBING	3-1/2"	11800	NAME, MODEL AND DEPTH OF TUBING PACKER Arrow SC-2 11,800'		
NAME OF PROPOSED INJECTION FORMATION Devonian		TOP OF FORMATION 12,233'		BOTTOM OF FORMATION 12,500'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES OH		PROPOSED INTERVAL(S) OF INJECTION 12,305' to 12,500'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Oil Well		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH -					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 300'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA 12,023'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 5,000	MINIMUM 15,000	MAXIMUM Closed	OPEN OR CLOSED TYPE SYSTEM Pressure	IS INJECTION TO BE BY GRAVITY OR PRESSURE? 150 - 1100	APPROX. PRESSURE (PSI) 150 - 1100
ANSWER YES OR NO WHETHER THE FOLLOWING WATERS ARE MINERALIZED TO SUCH A DEGREE AS TO BE UNFIT FOR DOMESTIC, STOCK, IRRIGATION, OR OTHER GENERAL USE - high salinity		WATER TO BE DISPOSED OF Penn		NATURAL WATER IN DISPOSAL ZONE -	
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mrs. M. Price, Mr. T. Price, Mrs. R. Baum, Mrs. G. A. Duncan, Mrs. L. B. Gainer.		ARE WATER ANALYSES ATTACHED? Yes			
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
Union Oil Co. of California, 500 N. Marienfeld, Midland, Texas 79701					
Phillips Petroleum Co., Box 3120, Midland, Texas 79701					
Midwest Oil Corporation, 1500 Wilco Bldg., Midland, Texas 79701					
Humble Oil & Refining Co., P. O. Box 1600, Midland, Texas 79701					
NOTE* Approval granted per NMOCC Order #R-3727 dated 4-15-69.					
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?	SURFACE OWNER Yes		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes		THE NEW MEXICO STATE ENGINEER Yes
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)	PLAT OF AREA Yes		ELECTRICAL LOG Yes		DIAGRAMMATIC SKETCH OF WELL Yes

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

(Signature)

Drilling Manager

(Title)

June 3, 1969

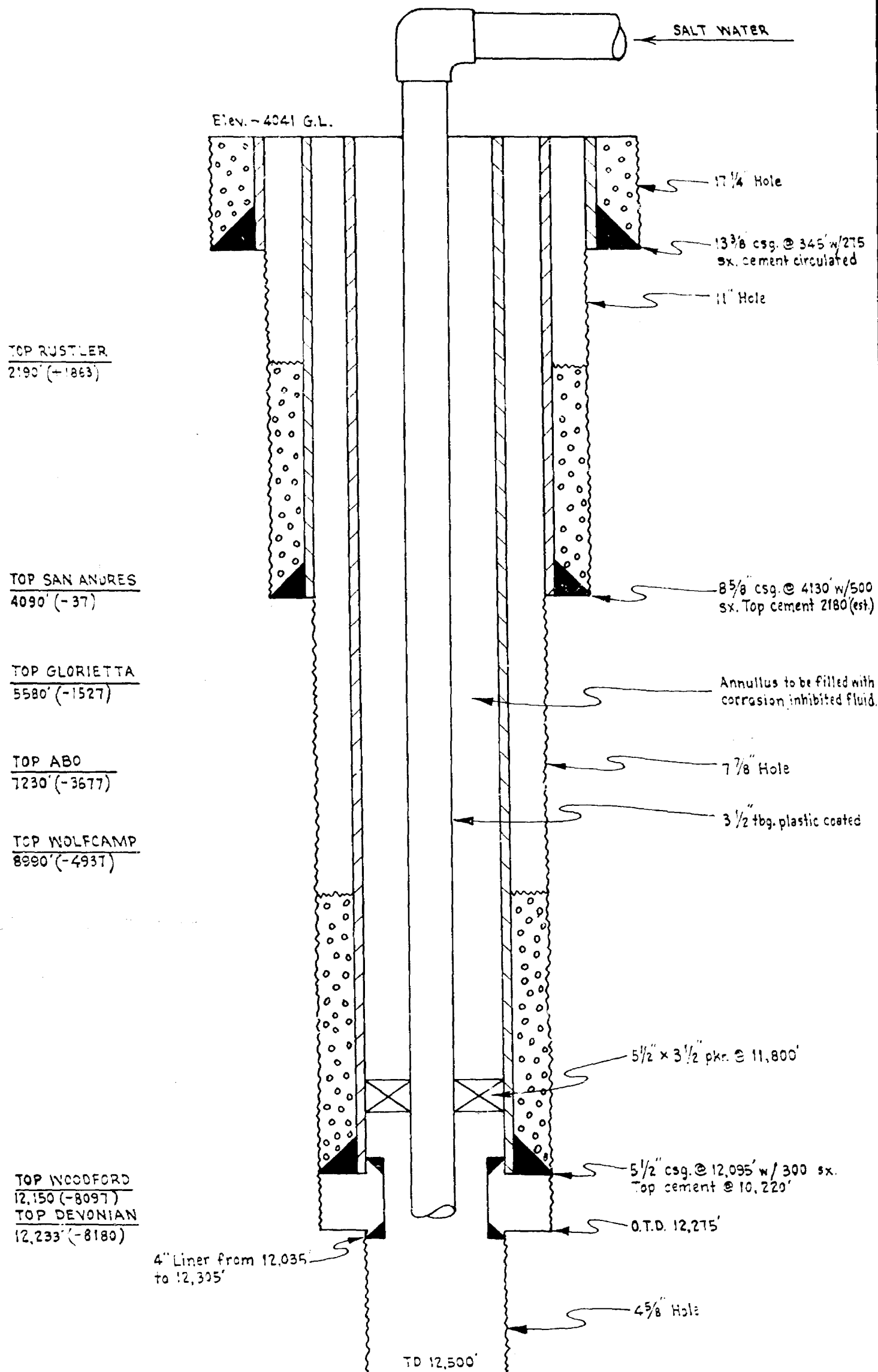
(Date)

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.

BTA OIL PRODUCERS

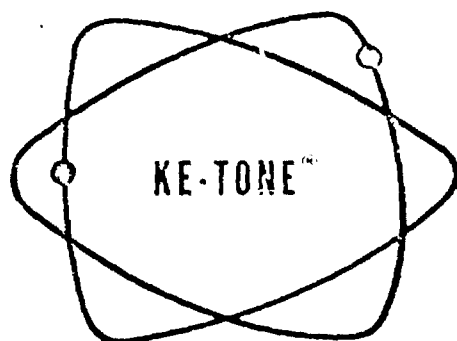
PRAY No 1

1980 FNL & 1980 FNL of Sec 5, T-10-S, R-36-E
Lea County, New Mexico



<p>12</p> <p>Atlantic M.I. Terry Borenbaugh, S&MI</p> <p>Superior 11-15-70 K-354 4122</p> <p>State</p>	<p>13</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>14</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>15</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>16</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>17</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>18</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>19</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>20</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>21</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>22</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>23</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>24</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>25</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>26</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>27</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>28</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>29</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>30</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>31</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>32</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>33</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>	<p>34</p> <p>Del-Leo 6-21-78 K-6102 10-21</p> <p>State</p>	<p>35</p> <p>Phillips 4-16-73 K-3205</p> <p>M.H. Christensen 4-16-73 K-3205</p> <p>State</p>	<p>36</p> <p>Union 11-15-70 K-315 20-22</p> <p>State</p>
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TELEPHONE: HOBBS 393-6215



UNITED CHEMICAL CORPORATION

OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company BTA

Field _____

Lease Bonds Heater Sampling Date 10/18/68

Type of Sample Heater treater

WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	300.40	6020
Magnesium (Mg++)	79.20	963
Sodium (Na+) (cal.)	1663.77	38,250
Iron		36
Bicarbonate (HCO ₃ -)	4.51	275
Carbonate (CO ₃ -)	NOT	FOUND
Hydroxide (OH-)	NOT	FOUND
Sulphate (SO ₄ -)	13.82	664
Chloride (Cl-)	2025.04	71,810
6.9 pH @ 68°F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as Ca CO ₃	379.60	18,980
Carbonate Hardness as CaCO ₃ (temporary)	4.51	226
Non-Carbonate Hardness as CaCO ₃ (permanent)	375.09	18,755
Alkalinity as CaCO ₃	4.51	226
Specific Gravity @ 68° F	1.075	

MOORE BUSINESS FORMS INC. LA

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

Calcium Carbonate Scaling Index = Positive @ 86°F

Calcium Sulfate Scaling Index = Negative

~~~~~ *Makes Water Work* ~~~~~



CARLTON BEAL  
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS  
MIDLAND, TEXAS 79701

AC 915-682-3753

June 3, 1969

In re: Waiver of Objection to Water Disposal Well  
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

Please be advised that we (Mrs. Mattie Price, Mr. Tommy Price, Mrs. Ruby Baum, Mrs. Georgie Ann Duncan, and Mrs. Lela Belle Gainer, surface owners of Section 5, T-10-S, R-36-E, Lea County, New Mexico) have been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

We hereby waive all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

\_\_\_\_\_  
Mrs. Mattie Price

\_\_\_\_\_  
Mr. Tommy Price

\_\_\_\_\_  
Mrs. Ruby Baum

\_\_\_\_\_  
Mrs. Georgie Ann Duncan

\_\_\_\_\_  
Mrs. Lela Belle Gainer



CARLTON BEAL  
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS  
MIDLAND, TEXAS 79701

AC 915-682-3753

June 3, 1969

In re: Waiver of Objection to Water Disposal Well  
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Midwest Oil Corporation, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Midwest Oil Corporation hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

For Midwest Oil Corporation



CARLTON BEAL  
SOLE OWNER

BTA OIL PRODUCERS  
104 SOUTH PECOS  
MIDLAND, TEXAS 79701  
AC 915-682-3753

June 3, 1969

In re: Waiver of Objection to Water Disposal Well  
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Humble Oil & Refining Company, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Humble Oil & Refining Company hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

For Humble Oil & Refining Company





CARLTON BEAL  
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS  
MIDLAND, TEXAS 79701

AC 918-692-3753

June 3, 1969

In re: Waiver of Objection to Water Disposal Well  
Section 5, T-10-S, R-36-E, Lea County, New Mexico.

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Phillips Petroleum Company, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Phillips Petroleum Company hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

For Phillips Petroleum Company



CARLTON BEAL  
SOLE OWNER

BTA OIL PRODUCERS

104 SOUTH PECOS  
MIDLAND, TEXAS 79701

AC 915-682-3753

June 3, 1969

In re: Waiver of Objection to Water Disposal Well  
Section 5, T-10-S, R-36-E, Lea County, New Mexico

New Mexico Oil Conservation Commission  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Dear Sir:

The undersigned, being an authorized representative of Union Oil Company, has been duly informed by BTA Oil Producers of their application for administrative approval to dispose of produced water in the Devonian zone of their Pray #1 SWD well located 1980' FNL and 1980' FWL of Section 5, T-10-S, R-36-E, Lea County, New Mexico.

Union Oil Company hereby waives all objections to granting approval of BTA Oil Producers' application.

Very truly yours,

For Union Oil Company

JASON W. KELLAHIN  
ROBERT E. FOX

KELLAHIN AND FOX  
ATTORNEYS AT LAW  
51 1/2 EAST SAN FRANCISCO STREET  
POST OFFICE BOX 1788  
SANTA FE, NEW MEXICO 87501

TELEPHONE 982-4315  
AREA CODE 505

March 21, 1969

*SWA*

*Case 4093*

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

Re: BTA

Gentlemen:

Enclosed please find original and two copies of  
application for BTA which is to be set for hearing  
April 9.

Yours very truly,

*Jason W. Kellahin*

JASON W. KELLAHIN

jwk;peg  
Enc. as stated

DOCKET MAILED

Date *3/27/69*

BEFORE THE

OIL CONSERVATION COMMISSION OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
BTA OIL PRODUCERS FOR APPROVAL OF  
SALT WATER DISPOSAL, LEA COUNTY,  
NEW MEXICO

*GMA*  
*Case 4093*

A P P L I C A T I O N

Comes now BTA OIL PRODUCERS, and applies to the Oil Conservation Commission of New Mexico for approval of salt water disposal in its State "E" Well No. 1, located 1980 feet from the North line, and 1980 feet from the West line of Section 5, Township 10 South, Range 36 East, N.M.P.M., in Lea County, New Mexico, and in support thereof would show the Commission:

1. Applicant's wells are offset wells to the West Crossroads Devonian Pool, and have not produced from the Devonian formation.
2. Applicant's wells are located within two miles of wells producing from the Devonian formation.
3. Applicant proposes to complete the State "E" Well No. 1 for the disposal of produced oil field brines in the Devonian formation in the interval from 12, 240 feet to 12,275 feet. Injection of water will be through 3-inch tubing under a packer.
4. Applicant proposes to complete the State "E" Well No. 2 for the disposal of produced oil field brines in the Devonian formation in the interval from 12,088 to 12,164 feet. Injection of water will be through 3-inch tubing under a packer.
5. The two wells, if approved, will be utilized for the disposal of water produced from the Bough "C" zone in Township

9 South, Range 36 East. Approximately 40,000 barrels of water per day will be disposed of in the wells.

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 use of the two wells for salt water disposal as applied for.

Respectfully submitted,

BTA OIL PRODUCERS

BY: Jason W. Kellahin  
Kellahin & Fox  
Post Office Box 1769  
Santa Fe, New Mexico

ATTORNEYS FOR APPLICANT

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4093

Order No. R- 5727

*10/18*  
APPLICATION OF BTA OIL PRODUCERS  
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 April 9, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this        day of April, 1969, 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, BTA Oil Producers, is the owner and  
*MAX PRAY* *MAX PRAY*  
operator of the State "E" Well No. 1 and the State "E" Well No. 2,  
located in Units F and C, respectively, of Section 5, Township 10  
South, Range 36 East, adjacent to the West Crossroads-Devonian  
Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said wells to  
~~inject~~  
dispose of produced salt water into the Devonian formation, with  
injection into the intervals as follows:

The open-hole interval from approximately 12,240<sup>233</sup>  
feet to 12,275 feet in its State "E" Well No. 1, and

The open-hole interval from approximately 12,088  
feet to 12,164 feet in its State "E" Well No. 2.

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4093

Order No. R- 5727

*018*  
APPLICATION OF BTA OIL PRODUCERS  
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 April 9, 1969,  
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NOW, on this \_\_\_\_\_ day of April, 1969, 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, BTA Oil Producers, is the owner and  
*MAX PRAY* *MAX PRAY*  
operator of the State "E" Well No. 1 and the State "E" Well No. 2,  
located in Units F and C, respectively, of Section 5, Township 10  
South, Range 36 East, adjacent to the West Crossroads-Devonian  
Pool, Lea County, New Mexico.

(3) That the applicant proposes to utilize said wells to  
~~inject~~  
dispose of produced salt water into the Devonian formation, with  
injection into the intervals as follows:

The open-hole interval from approximately 12,240<sup>233</sup>  
feet to 12,275 feet in its State "E" Well No. 1, and

The open-hole interval from approximately 12,088  
feet to 12,164 feet in its State "E" Well No. 2.

- (4) That the injection should be accomplished through:

2 7/8 -inch plastic-lined tubing installed  
in a packer set at approximately 12,000 feet  
in the <sup>Markey</sup> State "E"  
Well No. 1, and

2 7/8 -inch plastic-lined tubing installed  
in a packer set at approximately 12,000 feet  
in the State "E" Well No. 2;

that the casing-tubing annulus of each of the subject wells should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus of each of the subject wells 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, BTA Oil Producers, is hereby authorized to utilize its following-described wells in Section 5, Township 10 South, Range 36 East, NMPM, adjacent to the West Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation:

*Markey* State "E" Well No. 1, located in Unit F, injection to be accomplished through 2 7/8 -inch tubing installed in a packer set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,<sup>223</sup>~~240~~ feet to 12,275 feet, and

*Markey* State "E" Well No. 2, located in Unit C, injection to be accomplished through 2 7/8 -inch tubing installed in a packer set at approximately 12,000 feet, with



injection into the open-hole interval from  
approximately 12,088 feet to 12,164 feet;

PROVIDED HOWEVER, that the tubing of each of the subject wells shall be plastic-lined; that the casing-tubing annulus of each of the subject wells shall be filled with an inert fluid; and that a pressure gauge shall be attached to the annulus of each of the subject wells 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.

ROUGH  
DRAFT  
GMH/ir  
6/9/69

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. 4093  
Order No. R-3727

APPLICATION OF BTA OIL PRODUCERS 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 June 4, 1969,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of June, 1969, 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 by Order No. R-3727, dated April 15, 1969, the  
applicant, BTA Oil Producers was granted authority to dispose of  
produced salt water into the Devonian formation in the open-hole  
intervals from approximately 12,233 feet to 12,275 feet and 12,088  
feet to 12,164 feet, respectively, in its Max Pray State "E"  
Wells Nos. 1 and 2, located, respectively, in Units F and C of  
Section 5, Township 10 South, Range 36 East, NMPM, adjacent to the  
West Crossroads-Devonian Pool, Lea County, New Mexico.

(3) That the applicant seeks the amendment of said Order  
No. R-3727, as amended, to permit injection into the open-hole  
intervals from approximately 12,305 feet to 12,500 feet in said  
Well No. 1 and from 12,154 feet to 12,502 feet in said Well No. 2  
*in lieu of the injection intervals authorized by said Order No.  
R-3727.*

(4) 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 Order (1) of Order No. R-3727 is hereby amended to read in its entirety as follows:

" (1) That the applicant, BTA Oil Producers, is hereby authorized to utilize its following-described wells in Section 5, Township 10 South, Range 36 East, NMPPM, adjacent to the West Crossroads-Devonian Pool, Lea County, New Mexico, to dispose of produced salt water into the Devonian formation:

Max Pray State "E" Well No. 1, located in Unit F, injection to be accomplished through ~~3 1/4~~ <sup>3 1/8</sup>-inch tubing installed in a packer set at approximately ~~12,000~~ <sup>12,300</sup> feet, with injection into the open-hole interval from approximately 12,305 feet to 12,500 feet, and

Max Pray State "E" Well No. 2, located in Unit C, injection to be accomplished through ~~2 7/8~~ <sup>3 1/8</sup>-inch tubing installed in a packer set at approximately 12,000 feet, with injection into the open-hole interval from approximately 12,154 feet to 12,502 feet;

PROVIDED HOWEVER, that the tubing of each of the subject wells shall be plastic-lined; that the casing-tubing annulus of each of the subject wells shall be filled with an inert fluid: and that a pressure gauge shall be attached to the annulus of each of the subject wells ~~or the annulus left open at the surface~~ in order to determine leakage in the casing, tubing, or packer. "

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

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

STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARMIJO, Member

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

via Kune. - 3-20-69

## BTA Oil Producers

water into State "E" Well No. 1  
1980 FNL 1980 FWL Sec. 5  
10 S 36 E

off the West Crossroads Reservoir  
into Des.

12240 - 12275

3" Tubing into P

Sea Co.

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State "E" # 2

660 FNL 1980 FWL

Sec 5, 10-36

Des. 12088 - 12164

3" Tubing - Packer

water from Bay "C" T. 95 36 -  
- 40,000 -

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- SWD 52 -

- R-3210 -