

CASE 4412: Appli. of CONTINENTAL
FOR A PRESSURE MAINTENANCE
PROJECT, LEA COUNTY, N. MEX.

Case Number

4412

Application
Transcripts.

Small Exhibits

ETC.

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

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BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
August 19, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Continental
Oil Company for a pressure
maintenance project, Lea County,
New Mexico.

Case No. 4412

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4412.

MR. HATCH: Application of Continental Oil Company for a pressure maintenance project, Lea County, New Mexico.

MR. KELLAHIN: Same appearance on behalf of Continental and please reflect the witness has been sworn and qualified.

MR. NUTTER: The record will so show.

VICTOR T. LYON,

a witness, being first duly sworn according to law, upon his oath, testified as follows:

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q You are the same Mr. Lyon who testified in the previous case?

A Yes, sir.

Q Mr. Lyon, are you familiar with the application of Continental Oil Company in Case 4412?

A Yes, I am.

Q What is proposed by the Applicant in this case?

A Case 4412 is the application of Continental Oil Company for authority to inject produced water into the McCallister "A" Well No. 2 or the McCallister "A" No. 3 or both wells which are located in Section 24, Township 26 South, Range 36 East. This, in effect, an extension of an existing

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pressure maintenance project in the Scarborough Pool.

Q That existing pressure maintenance project has been approved by the Oil Conservation Commission?

A Yes, sir.

MR. KELLAHIN: I would like to ask that the record in Case 4198 and before this Commission be incorporated into the record in this case.

MR. NUTTER: By reference, the record in Case 4198 will be incorporated into the record of Case No. 4412.

Q (By Mr. Kellahin) Referring to what has been marked Exhibit No. 1, would you identify that exhibit, please?

A Yes, sir, Exhibit No. 1 is a location and ownership plat showing the McCallister "A" lease outlined in red and the Eaves "A" and "B" leases which are the Eaves pressure maintenance project outlined in blue. The proposed injection wells are inscribed, circumscribed with a red triangle and the existing injection well in the Eaves project is shown by a blue triangle. Well No. 2 located in Unit A of Section 24 is located 330 feet from the north line and 990 feet from the east line of Section 24. Well No. 3 is located 660 feet from the south line and 660 feet from the east line of that section. The producing wells in the Scarborough Pool are shown and designated as well as the ownership of the leases in this

project and in the surrounding area.

Q Now, referring to what is marked as Exhibit No. 2, would you identify that exhibit?

A Yes, sir, Exhibit 2 is a copy of form C-108, showing pertinent data for injection projects. It shows the location of the well as I have previously described. The casing, setting depth, the amount of cement, the type of cement, the injection interval, which is the Yates formation, the top and bottom perforations, open-hole interval, estimated volume, and pressures to be used and the setting depth, tubing, type of packer to be used, this sort of thing.

Q This is a producing well that is being converted to injection?

A This has been a producing well that has been shut in since 1966, I believe.

Q Referring to what has been marked as Exhibit No. 3, would you identify that exhibit?

A Exhibit 3 is a diagram showing schematically the construction of the well as was described on Exhibit No. 2.

Q You will be injecting through tubing under a packer?

A Yes, sir.

Q Will you fill the casing tubing annulus with a fluid?

A Yes, we will.

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- Q A pressure gauge at the surface?
- A Yes, or we will leave the pressure connection open.
- Q To detect the possibility of a leak?
- A Yes, sir.
- Q Exhibit No. 4, would you identify that?
- A Yes, sir, Exhibit No. 4 is a copy of a portion of the radio activity run on McCallister "A" No. 2. It shows the top of the Yates formation at twenty-nine seventy-five, the perforations in the overall interval from 3,045 to 3,063. The open-hole interval from the bottom of the seven inch casing at approximately three thousand and eighty-four feet to total of depth of thirty-two seventeen.
- Q Exhibit No. 5?
- A Exhibit No. 5 is a form C-108 for McCallister No. 3 which is another well proposed for injection and the information shown on this is the same information that relative to this well as was shown for Well No. 2.
- Q And as with Well No. 2, you will fill the casing tubing annulus?
- A Yes, sir.
- Q And leave the pressure or leave the annulus open at the surface?
- A Yes.
- Q Exhibit No. 6?

- A Exhibit 6 is a diagram showing schematically the construction of the well as described in Exhibit No. 5.
- Q In each case, you are using plastic-lined tubing?
- A Yes, sir.
- Q Now, Exhibit No. 7?
- A Exhibit No. 7 is a copy of the radio activity log running in McCallister "A" No. 3 showing perforations, and open-hole intervals, total depth, the casing set at the top of the Yates of twenty-nine eighty-three.
- Q Now, referring to Exhibit No. 8, would you identify that exhibit?
- A No. 8 is a copy of a water analysis run on a sample collected from McCallister "A" No. 5 which is to the south of Well No. 3 of our most recent completions. I also have an analysis on No. 6. This is a very recent completion and I am not certain that all of the lode water has been purged from the well. I think the analysis on No. 5 is probably more representative.
- Q Is this water you will be injecting into these wells?
- A Yes, sir.
- Q What is the water source, Yates, Seven Rivers?
- A In this particular area, I believe our production is solely from the Yates formation. The water will be that which is produced on the McCallister "A" lease.

Q But not necessarily from the McCallister "A" No. 5 Well.

A Right.

Q From all the wells on the lease?

A Yes. At the time we filed this application, we were not certain which of the two wells we would inject into first. Due to the results of the drilling of McCallister "A" No. 5 and No. 6 which are recent wells we had cause to believe that there may be recoverable oil in No. 3 so at about the time we filed this application, we performed some remedial work to test these intervals in No. 3 and they were found to be oil productive. We are producing oil from No. 3 and at this time we plan to inject only into Well No. 2 and will continue to do so as long as No. 3 is commercially oil productive.

Q You testified in Case No. 4198, did you not?

A Yes, sir.

Q At that time did you testify that the Seven Rivers formation, at least in this area, has some intervals with an active water drive?

A Yes, sir, in that case and rather than going into all the details again, I would like to briefly review that. There are two areas in this particular province, one which we designate the Four Reef, which is west of the crest of the reef and the back reef which is east of the crest. In

some areas, both of these provinces indicate some water drive, particularly in the Seven Rivers. In the other case we were injecting into the Eaves Eight No. 10, which is a back-reef well and is open both in the Yates and Seven Rivers. These two wells are located in Four Reef Section and completed in Yates only, which we believe is going to be susceptible to pressure maintenance and/or waterflooding operations.

Q So you are injecting into the same interval in which you are producing?

A Yes, sir.

Q Do you desire that the Commission permit you to inject in both the Yates and Seven Rivers formations?

A Yes, sir, we are still studying this area at the present time under the provision of Order No. R-3221. It is necessary for us to inject water underground and in the event, we think it is unlikely at this time, but in the event the present intervals are not capable of accepting the water which we inject, we would like to have authority to inject into the Seven Rivers also. Also, we keep finding things we have been producing in this pool for forty-two years but we are still learning things about it. I wouldn't rule out the possibility that there is recoverable oil in the Seven Rivers, in the

Four Reef Section. We would like to have flexibility in the Order. If the Commission prefers to restrict us to a definite interval, we would like to have administrative procedures in the Order whereby we can change this. Actually, we would prefer that the Order grant permission to drill into Yates and Seven Rivers.

Q What volume of water do you anticipate you will inject into each of the wells?

A I believe that the Exhibit 2 shows the present producing volume in there at approximately 100 barrels per day and we do not expect more than about fifteen hundred barrels per day.

Q And what pressure will it take to inject it, do you anticipate?

A Initially, we don't expect to encounter any pressure. This well has produced rather large quantities of water and we believe it will receive large quantities of water without pressure. At the present time we expect it to operate on a gravity system.

Q Were Exhibits 1 through 8 prepared by you or under your supervision?

A Yes, they were.

MR. KELLAHIN: I would like to offer Exhibits 1 through 8, inclusive.

MR. NUTTER: Continental Exhibits 1 through 8 will be

admitted in evidence.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Lyon, on Exhibit No. 2 and Exhibit No. 5, you haven't asked for authority to inject into anything except the Yates, have you?

A I believe that's correct now that you mentioned it.

Q On Exhibit 2 you ask for Yates on perforated interval in 3045 to 3063, in the open-hole interval from 3076 to 3217?

A Right, these are the intervals which are presently open.

Q And that does not include any Seven Rivers, does it?

A No, it does not.

Q Pretty much the same thing on Exhibit No. 5?

A Yes, sir.

Q For the No. 3 Well?

A Yes, sir.

Q What did the Order in Case No., whatever it was, in 4198, what did the Order authorize for injection there in the Eaves No. 10?

A In the revision of the Order R-3487A it provided for injection into perforated and open-hole interval from approximately 3107 to 3410.

Q 3107 to 3410?

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A Yes, sir.

Q And does that include some Seven Rivers?

A It extends pretty well into the Seven Rivers.

Q What did the original Order provide, Yates only?

A No, it was Yates and, I believe, the top two zones approximately seventy feet, I think, into the Seven Rivers. I think I have that Order here if you would like to see it.

Q What was the purpose of reopening the case, to amend the injection interval?

A In Case 4198?

Q Yes.

A We had found the well would not accept the volume of water we needed to inject, and consequently, we deepened the well beyond the intervals which had been.

Q To broaden the area of injection then?

A Yes, sir. Yes, sir, that original interval was 3208 to 3255.

Q All on the Yates?

A No, this was on the Seven Rivers.

Q So you not only came up the hole as well as going down the hole?

A Yes, sir. There were some perforated intervals in there which were isolated by a packer and we moved the packer from below these perforations to a point above to inject

into the Yates and Seven Rivers.

Q Can you give us any depth to include the Yates and Seven Rivers and we would have to have revisions of Exhibits 2 and 5, I think, to change to Yates and Seven Rivers. We need to know the perforated and open-hole intervals you propose. I think we are going to have some specific footage intervals defined. Maybe you can furnish those to us later?

A I would like to consult with my geologist and see if we can find the appropriate depth in there because the fact we are in the Four Reef Section and I do not believe we have any penetration that deep in this immediate area. I would like to furnish that later if I may.

Q If you will furnish that with some specific limitations, top and bottom, for the proposed intervals?

A Be glad to do that.

MR. NUTTER: Does anyone have any further questions of Mr. Lyon? You may be excused. Do you have anything further Mr. Kellahin?

MR. KELLAHIN: That is all.

MR. NUTTER: Does anyone have anything they care to offer in Case 4412? The case will be taken under advisement.

I N D E X

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E X H I B I T S

	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Nos. 1 through 8	9

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

I, SOVEIDA GONZALES, 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 H. Jones
COURT REPORTER

I do hereby certify that the foregoing is a complete record of the proceedings at the Examiner hearing of Case No. 4412 heard by me on 8/1/70, 19 70.

Asst. Sec. **Assistant Secretary**
New Mexico Oil Conservation Commission

deanley-meier

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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

September 10, 1970

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

Re: Case No. 4412
Order No. R-4026
Applicant:
Continental Oil Company

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. 4412
Order No. R-4026

APPLICATION OF CONTINENTAL OIL
COMPANY FOR A PRESSURE MAINTENANCE
PROJECT, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on August 19, 1970,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 10th day of September, 1970, 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, Continental Oil Company, seeks authority
to institute a pressure maintenance project in the Scarborough Yates-
Seven Rivers Pool on its McCallister "A" Lease in Section 24, Township
26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection
of water into the Yates and Seven Rivers formations through its
McCallister "A" Well No. 2, located 330 feet from the North line and
990 feet from the East line of said Section 24, and through its Mc-
Callister "A" Well No. 3, located 660 feet from the South line and
660 feet from the East line of said Section 24.

(3) That the proposed pressure maintenance project is in the
interest of conservation and should result in greater ultimate recovery
of oil, thereby preventing waste.

(4) That the subject application should be approved and the
project should be governed by the provisions of Rules 701, 702, and
703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby
authorized to institute a pressure maintenance project in the

-2-

CASE No. 4412
Order No. R-4026

Scarborough Yates-Seven Rivers Pool on its McCallister "A" Lease in Section 24, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of produced salt water into the Yates and Seven Rivers formations through its following-described wells in said Section 24:

McCallister "A" Well No. 2, located 330 feet from the North line and 990 feet from the East line, injection to be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3045 feet to 3063 feet and into the open-hole interval from 3076 feet to 3217 feet; and

McCallister "A" Well No. 3, located 660 feet from the South line and 660 feet from the East line, injection to be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3039 feet to 3100 feet and into the open-hole interval from 3133 feet to 3245 feet;

PROVIDED HOWEVER, 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 tubing, casing, or packer.

(2) That the subject pressure maintenance project is hereby designated the Continental McCallister "A" Scarborough Pressure Maintenance Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(3) That monthly progress reports of the pressure maintenance project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(4) 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. Armiijo
ALEX J. ARMIJO, Member

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

from

V. T. LYON

Aug. 24, 1970

To Dan Nutter NMOC - Santa Fe

Attached are revised forms C-108 for case no 4412, showing in red the changes proposed for possible future injection intervals. Also attached is waiver received from Pan American which I forgot to introduce at hearing.

For your information today's drilling report showed they hit fill in McCallister "A" No. 2 at 3101' and were unable to circulate at that point, so set packer at 3007' and will inject water thru perms. 3045-63 and open hole 3076-3101 until formation pressures up and will permit circulation.

W. T. Lyon

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

OPERATOR Continental Oil Company		ADDRESS P. O. Box 460, Hobbs, New Mexico	
LEASE NAME McCallister A	WELL NO. 2	FIELD Scarborough	COUNTY Lea
LOCATION UNIT LETTER A ; WELL IS LOCATED 330 FEET FROM THE N LINE AND 990 FEET FROM THE E LINE, SECTION 24 TOWNSHIP 26S RANGE 36E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	15 1/2"	247'	40
INTERMEDIATE	8 1/4"	1525'	100
LONG STRING	7"	3076'	100
TUBING	2 3/8"	3010'	100
NAME OF PROPOSED INJECTION FORMATION Yates & Seven Rivers		NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tension Model AD-1 or equivalent @ 3010'	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? Both	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Producing oil well	
LIST ALL SUCH PERFORATED INTERVALS AND SACKS OF CEMENT USED TO SEAL OFF OR SQUEEZE EACH		HAS WELL EVER BEEN PERFORATED IN ANY ZONE OTHER THAN THE PROPOSED INJECTION ZONE? No	
None		None	
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 200'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) MINIMUM 400 MAXIMUM 1500		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 - No		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	
WATER TO BE DISPOSED OF No		APPROX. PRESSURE (PSI) 0	
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mr. Frank Anthony, Box 1612, Monahans, Texas		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL		APPROX. PRESSURE (PSI) 0	
El Paso Natural Gas Company, Jal, New Mexico		0	
Pan American Petroleum Corporation, Box 68, Hobbs, New Mexico		0	
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		ELECTRICAL LOG	
PLAT OF AREA		DIAGRAMMATIC SKETCH OF WELL	

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

(Signature)

(Title)

(Date)

NOTE: Should waivers from 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.

NEW MEXICO OIL CONSERVATION COMMISSION

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

OPERATOR Continental Oil Company		ADDRESS P. O. Box 460, Hobbs, New Mexico	
LEASE NAME McCallister A	WELL NO. 3	FIELD Scarborough	COUNTY Lea
LOCATION UNIT LETTER P ; WELL IS LOCATED 660 FEET FROM THE S LINE AND 660 FEET FROM THE E LINE, SECTION 24 TOWNSHIP 26S RANGE 36E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	13"	462'	400
INTERMEDIATE	9 5/8"	2802'	900
LONG STRING	7"	3133'	400
TUBING	2 3/8"	3010'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker AD-1 or equivalent @ 3010'
NAME OF PROPOSED INJECTION FORMATION Yates & Seven Rivers		TOP OF FORMATION (Yates) 2983'	BOTTOM OF FORMATION 3270' est.
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing	PERFORATIONS OR OPEN HOLE? Both	PROPOSED INTERVAL(S) OF INJECTION 2983'-3100' and 3133'-3245'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Producing 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 None			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 200'		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 400	MINIMUM 400	MAXIMUM 1500	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 - No		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mr. Frank Anthony, Box 1612, Monahans, Texas		APPROX. PRESSURE (PSI) 0	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL None			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? None			
SURFACE OWNER None		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL None	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B) None		ELECTRICAL LOG None	
PLAY OF AREA None		DIAGRAMMATIC SKETCH OF WELL None	

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

(Signature)

(Title)

(Date)

NOTE: Should waivers from 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.

MAIN OFFICE 000

'70 AUG 25 PM 1 15

TO: DIRECTOR

CONFIDENTIAL - COMPANY

FROM:

RE YOUR LETTER OF AUGUST 13, 1970, REQUESTING WAIVER FOR APPLICATION
TO CANCEL THE MCCALLISTER "A" WD. 8 (UNIT A, SECTION 20, T-20-5,

CONROUCH YATES-SEVEN GIVERS POOL, TO WATER INJECTION.

AMERICAN PETROLEUM CORP. HEREBY WAIVES OBJECTION TO THIS APPLI-

4-14-70 RS TIME 2:09

AMERICAN PETROLEUM CORP.

END

CONFIDENTIAL

Docket No. 19-70

DOCKET: REGULAR HEARING - WEDNESDAY - AUGUST 19, 1970

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

- ALLOWABLE:
- (1) Consideration of the oil allowable for September and October, 1970;
 - (2) Consideration of the allowable production of gas for September, 1970 from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, September, 1970.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NOTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, IN THE OIL CONSERVATION COMMISSION CONFERENCE ROOM ON THE SECOND FLOOR OF SAID BUILDING AT 9:30 a.m.

CASE 4414: Southeastern New Mexico nomenclature case calling for an order for the creation and extension of certain pools in Lea, Chaves, and Eddy Counties, New Mexico:

- (a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Townsend-Morrow Gas Pool. The discovery well is the Avance Oil & Gas Company State ETA No. 2 located in Unit I of Section 8, Township 16 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM
SECTION 8: SE/4

- (b) Extend the Allison-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NMPM
SECTION 12: S/2

- (c) Extend the Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM
SECTION 36: NW/4

(d) Extend the Drinkard Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
SECTION 24: E/2 NE/4

(e) Extend the EK Yates-Seven Rivers-Queen Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM
SECTION 19: SE/4
SECTION 20: SW/4

(f) Extend the Hobbs-Blinebry Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM
SECTION 19: S/2

(g) Extend the Indian Basin-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 23 EAST, NMPM
SECTION 21: N/2 and N/2 N/2 N/2 S/2

(h) Extend the Paduca-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 31 EAST, NMPM
SECTION 1: W/2
SECTION 12: W/2

(i) Extend the Springs-Upper Pennsylvanian Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 21 SOUTH, RANGE 25 EAST, NMPM
SECTION 3: Lots 1, 2, 7, 8, 9, 10,
15 and 16

(j) Extend the Sulimar-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM
SECTION 26: SW/4 NE/4

(k) Extend the Tres Papalotes-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM
SECTION 33: NW/4

(l) Extend the Northwest Vacuum-Wolfcamp Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM
SECTION 5: SW/4

CASE 4413: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Stanley Leonard Jones dba Francisca Corporation and all other interested parties to appear and show cause why the Francisca Corporation Beeman Well No. 1 located 1980 feet from the South and West lines of Section 2, Township 24 South, Range 28 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

CASE 4172: (Reopened)

In the matter of Case No. 4172 being reopened pursuant to the provisions of Order No. R-3816, which order established 80-acre spacing units for the Northeast Lovington-Pennsylvanian Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on 40-acre spacing units.

CASE 4399: Application of Pan American Petroleum Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle in the wellbore production from the Blinebry, Tubbs, and Drinkard Oil Pools in its Southland Royalty "A" Well No. 8 located in Unit O of Section 4, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 4400: Application of David C. Collier 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. Said exception would be for applicant's Southern Federal Lease in Units A, C, E, G, I, K, and M of Section 30, Township 19 South, Range 31 East, North Hackberry Yates-Seven Rivers Pool, Eddy County, New Mexico.

- CASE 4401: Application of Read and Stevens, 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 Queen, San Andres, Glorieta, and Delaware formations in the open-hole interval between the 8 5/8 inch casing shoe at 3998 feet and the top of the cement at 6109 feet in its Getty State "B.G." Well No. 1 located in Unit K of Section 12, Township 19 South, Range 34 East, Quail-Queen Pool, Lea County, New Mexico.
- CASE 4402: Application of Reserve Oil and Gas Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the Cooper-Jal Unit Area comprising 2581 acres, more or less, of Federal and fee lands in Township 24 South, Ranges 36 and 37 East, Lea County, New Mexico.
- CASE 4403: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 26 wells into the Lower Seven-Rivers and Queen formations underlying its Cooper-Jal Unit Area, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4404: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 23 wells into the Tansill, Yates, and Upper and Middle Seven-Rivers formations underlying its Cooper-Jal Unit Area, Jalmat Pool, Lea County, New Mexico.
- CASE 4405: Application of Reserve Oil and Gas Company for a unit agreement, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the South Langlie-Jal Unit Area comprising 1080 acres, more or less, of fee lands in Township 25 South, Range 37 East, Lea County, New Mexico.
- CASE 4406: Application of Reserve Oil and Gas Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by water injection through 13 wells into the Seven Rivers and Queen formations underlying its South Langlie-Jal Unit Area, Langlie-Mattix Oil Pool, Lea County, New Mexico.
- CASE 4407: Application of Tenneco Oil Company for an unorthodox oil well location, McKinley County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox Dakota oil well location 1980 feet from the South and East lines of Section 13, Township 17 North, Range 9 West, Hospah Field, McKinley County, New Mexico, said location being closer than 330 feet to an inner boundary line.

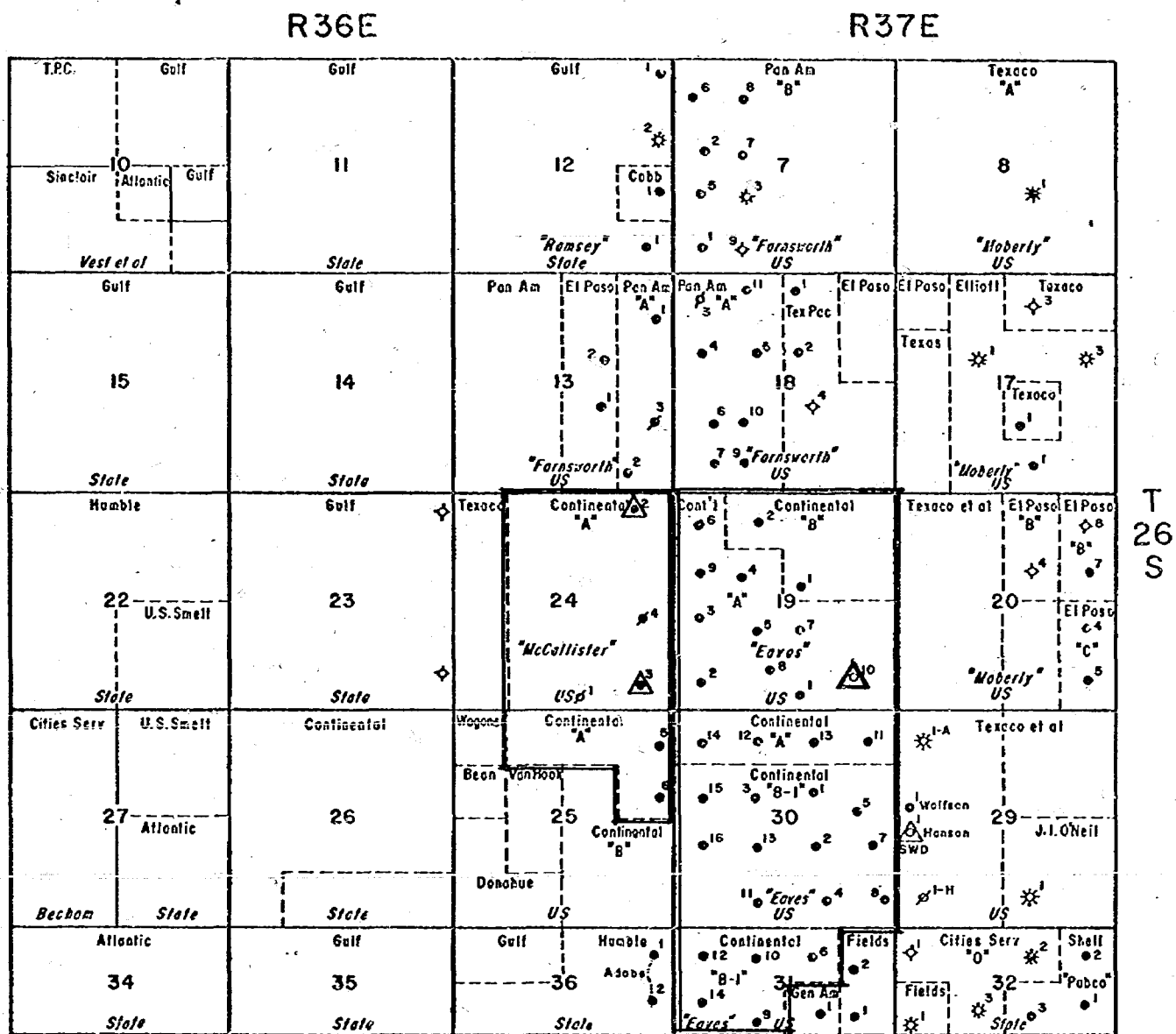
- CASE 4408: Application of Keohane and Westall for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties, New Mexico. Said exception would be for applicants' State Well No. 1, located in Unit D of Section 2, Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.
- CASE 4409: Application of Anadarko Production Company for two waterflood expansions, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the expansion of its Federal Q Waterflood Project by the conversion to water injection of three additional wells in Units J, L, and P of Section 3, Township 17 South, Range 30 East, Square Lake Pool, Eddy County, New Mexico. Applicant further seeks the expansion of the Stallworth Oil and Gas Company Parke Waterflood Project by the conversion to water injection of one additional well in Unit H of said Section 3.
- CASE 4410: Application of Major, Giebel & Forster for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the SE/4 of Section 28, Township 25 South, Range 37 East, Crosby-Devonian Pool, Lea County, New Mexico, said acreage to be dedicated to a well to be drilled in said quarter section. Also, to be considered will be the cost of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.
- CASE 4411: Application of Continental Oil Company for an exception to Rule 104 C I, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C I of the Commission Rules and Regulations to permit the completion within 660 feet of another producing well in the same formation of its State H-35 Well No. 10 located 2030 feet from the North line and 1780 feet from the East line of Section 35, Township 17 South, Range 34 East, Vacuum Pool, Lea County, New Mexico.
- CASE 4412: Application of Continental Oil Company for a pressure maintenance project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project by the injection of water into the Yates and Seven Rivers formations through two wells on its McCallister "A" lease in Section 24, Township 26 South, Range 36 East, Scarborough Yates-Seven Rivers Pool, Lea County, New Mexico. 34877

R 3487 - Table 410

3208-3255 516

R-3487- Table 410

3107-5110 512



BEFORE EXAMINER NUTTER
OIL CONSERVATION DIVISION
Applicant EXHIBIT NO. 1
CASE NO. 4412

CONTINENTAL OIL COMPANY
PRODUCTION DEPARTMENT—HOBBS DIVISION

SCARBOROUGH POOL
LEA COUNTY, NEW MEXICO

SCALE
0 2000 4000

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

OPERATOR Continental Oil Company		ADDRESS P. O. Box 460, Hobbs, New Mexico	
LEASE NAME McCallister A	WELL NO. 2	FIELD Scarborough	COUNTY Lea
LOCATION UNIT LETTER A ; WELL IS LOCATED 330 FEET FROM THE N LINE AND 990 FEET FROM THE E LINE, SECTION 24 TOWNSHIP 26S RANGE 36E NMPM.			

CASING AND TUBING DATA					
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT	TOP OF CEMENT	TOP DETERMINED BY
SURFACE CASING	15 1/2"	247'	40	145'	Calc.
INTERMEDIATE	8 1/4"	1525'	100	810'	Calc.
LONG STRING	7"	3076'	100	2000'	Calc.
TUBING	2 3/8"	3010'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Tension Model AD-1 or equivalent @ 3010'		
NAME OF PROPOSED INJECTION FORMATION Yates		TOP OF FORMATION 2975'		BOTTOM OF FORMATION 3276' est	
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? Both		PROPOSED INTERVAL(S) OF INJECTION Perfs 3045-3063' & O.H. 3076-3217'	
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No		IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Producing 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 None					
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 200'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None		DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None	
ANTICIPATED DAILY INJECTION VOLUME (BBLS.) 400	MINIMUM 400	MAXIMUM 1500	OPEN OR CLOSED TYPE SYSTEM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	APPROX. PRESSURE (PSI) 0
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 - No			WATER TO BE DISPOSED OF No		NATURAL WATER IN DISPOSAL ZONE No
ARE WATER ANALYSES ATTACHED? Yes					
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mr. Frank Anthony, Box 1612, Monahans, Texas					
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL					
El Paso Natural Gas Company, Jal, New Mexico					
Pan American Petroleum Corporation, Box 68, Hobbs, New Mexico					

BEFORE EXAMINER NUTTER
OIL CONSERVATION COMMISSION
APPLICANT'S EXHIBIT NO. 2
CASE NO. 4412

HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING? YES		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		ELECTRICAL LOG	DIAGRAMMATIC SKETCH OF WELL

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

(Signature)

(Title)

(Date)

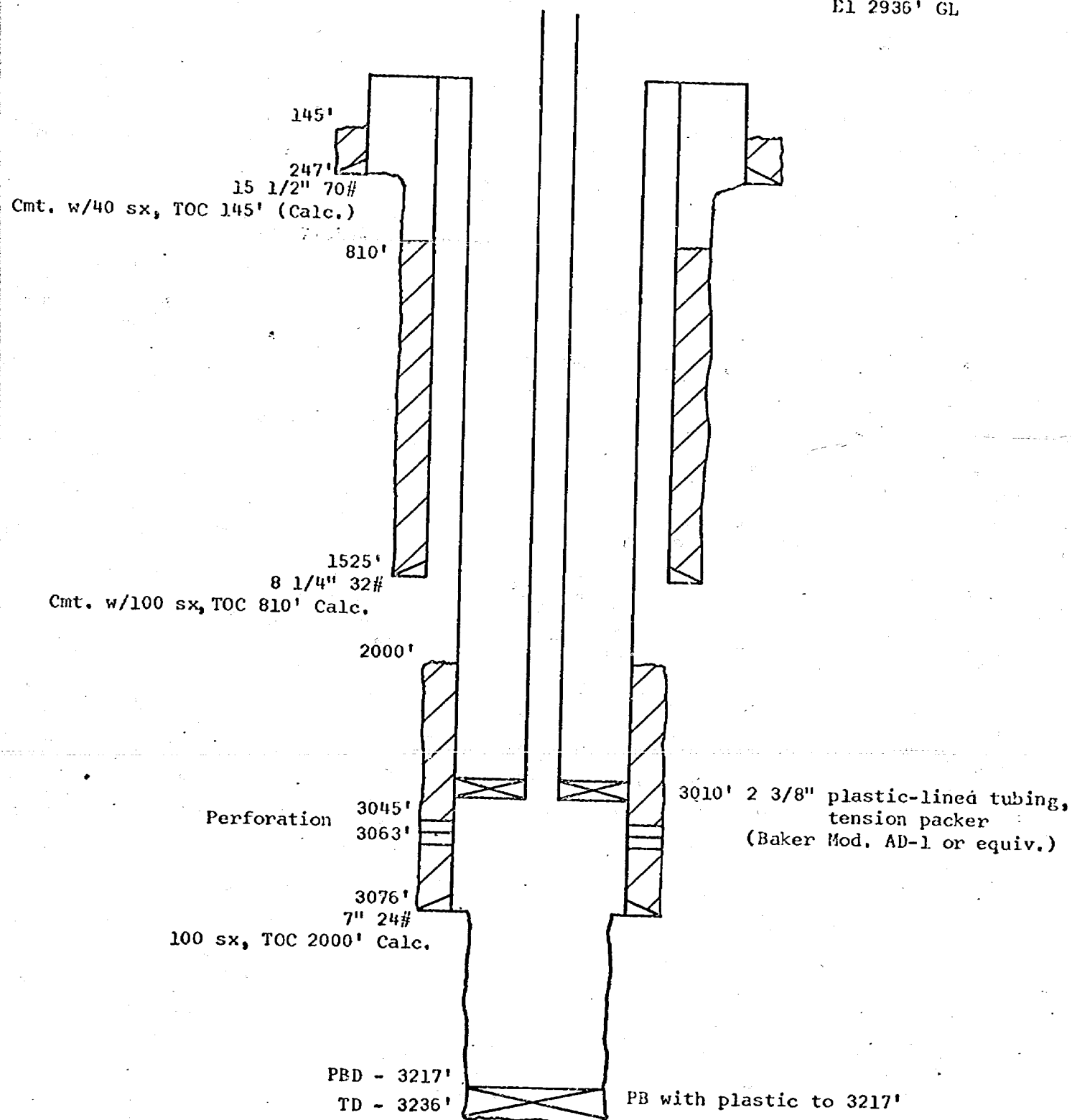
NOTE: Should waivers from the surface owner and all operators within one-half mile of the proposed injection well not accompany this application, the New Mexico Oil Conservation Commission will hold the application for a period of 15 days from the date of receipt by the Commission's Santa Fe office. 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.

Exhibit No. 2

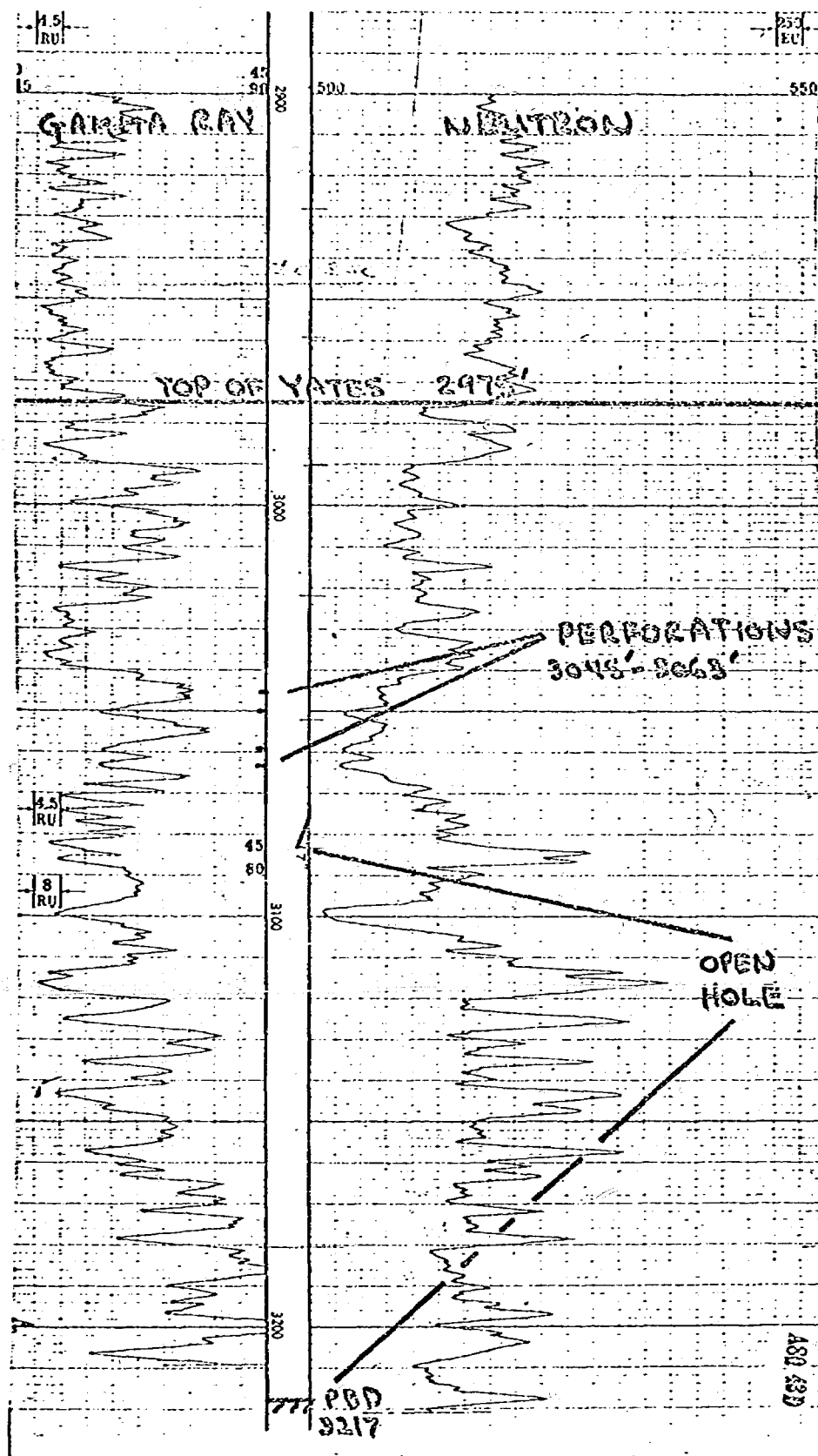
McCallister "A" No. 2

Proposed Injection Schematic

330' FNL, 990' FEL
Sec. 24, T-26S, R-37E
E1 2936' GL



MCCALLISTER "A" NO. 2



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

OPERATOR Continental Oil Company		ADDRESS P. O. Box 460, Hobbs, New Mexico	
LEASE NAME McCallister A	WELL NO. 3	FIELD Scarborough	COUNTY Lea
LOCATION UNIT LETTER P ; WELL IS LOCATED 660 FEET FROM THE S LINE AND 660 FEET FROM THE E LINE, SECTION 24 TOWNSHIP 26S RANGE 36E NMPM.			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	13"	462'	400
INTERMEDIATE	9 5/8"	2802'	900
LONG STRING	7"	3133'	400
TUBING	2 3/8"	3010'	NAME, MODEL AND DEPTH OF TUBING PACKER Baker AD-1 or equivalent @ 3010'
NAME OF PROPOSED INJECTION FORMATION Yates		TOP OF FORMATION 2983'	BOTTOM OF FORMATION 3270' est.
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLES? Both	PROPOSED INTERVAL(S) OF INJECTION 3039'-3100' and 3133'-3245'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? Producing 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 None			
DEPTH OF BOTTOM OF DEEPEST FRESH WATER ZONE IN THIS AREA 200'		DEPTH OF BOTTOM OF NEXT HIGHER OIL OR GAS ZONE IN THIS AREA None	DEPTH OF TOP OF NEXT LOWER OIL OR GAS ZONE IN THIS AREA None
ANTICIPATED DAILY INJECTION VOLUME (BBL'S.) 400	MINIMUM 400	MAXIMUM 1500	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 - No		IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity	APPROX. PRESSURE (PSI) 0
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Mr. Frank Anthony, Box 1612, Monahans, Texas		WATER TO BE DISPOSED OF No	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL None		NATURAL WATER IN DISPOSAL ZONE No	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		ARE WATER ANALYSES ATTACHED? Yes	
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL	
SURFACE OWNER		ELECTRICAL LOG	
PLAT OF AREA		DIAGRAMMATIC SKETCH OF WELL	

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

(Signature)

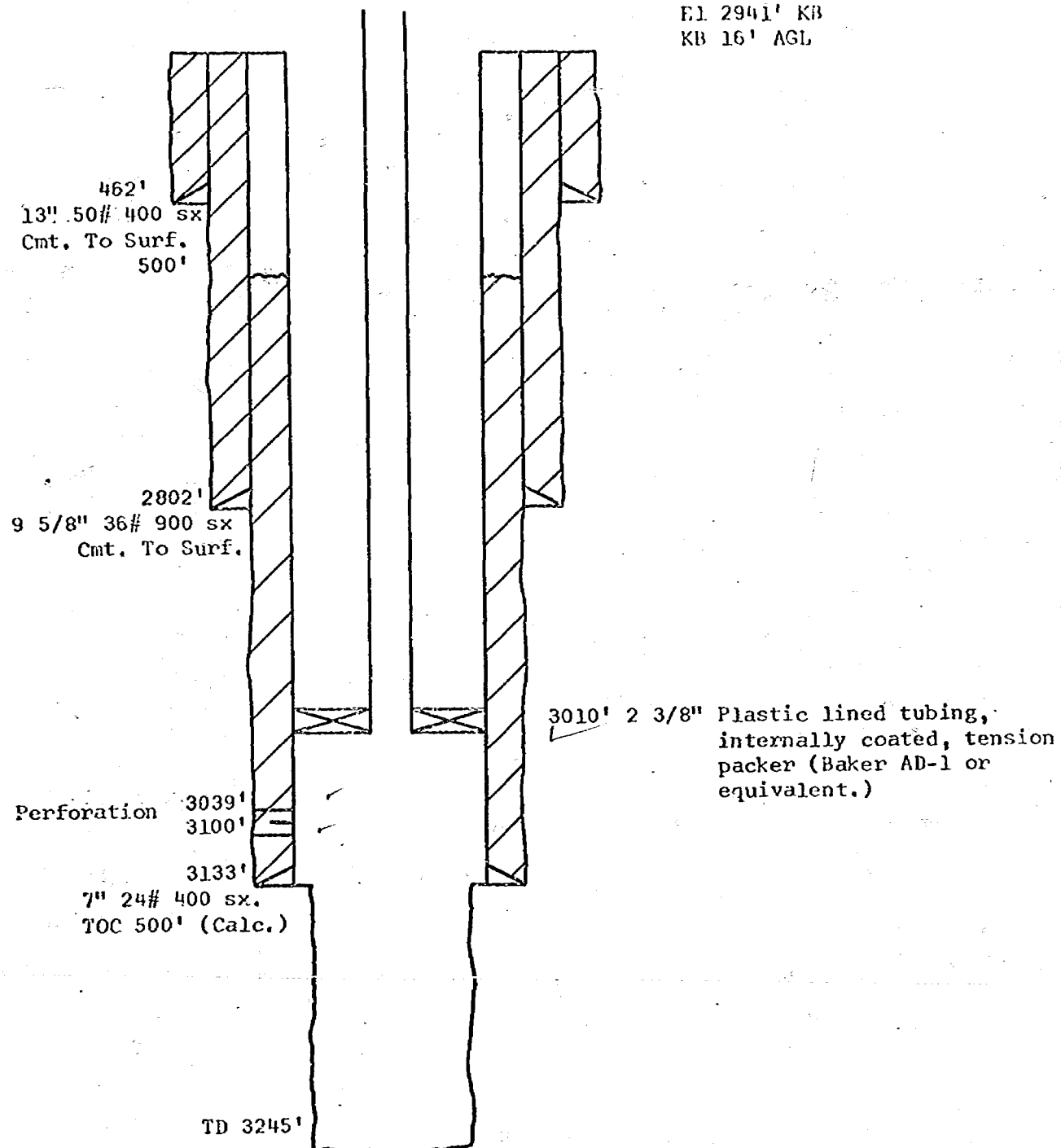
(Title)

(Date)

NOTE: Should waivers from 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.

Proposed Injection Schematic

660' FSL, 660' FHL,
Sec. 24, T-26S, R-36E
El. 2941' KB
KB 16' AGL



McCALLISTER "A" NO. 3

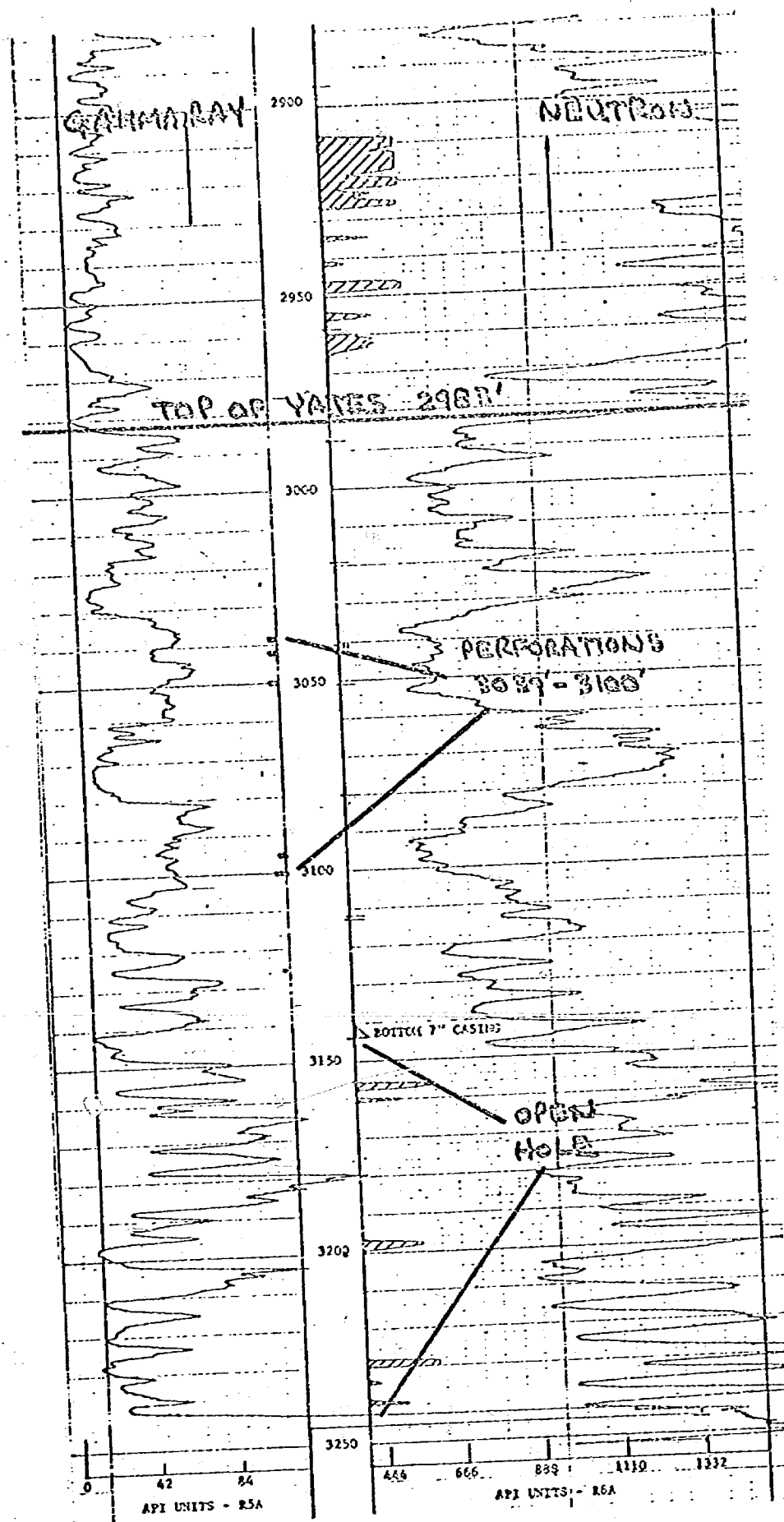


Exhibit No. 7



AREA CODE - 505

UNITED CHEMICAL CORPORATION
OF NEW MEXICO

601 NORTH LEECH

P. O. BOX 1499

HOBBS, NEW MEXICO 88240

Company Continental Oil CompanyField SCARBOROUGH YATES SEVEN RIVERSLease McAlister A #5Sampling Date 4-28-70

Type of Sample _____

WATER ANALYSIS

IONIC FORM	me/l *	mg/l *
Calcium (Ca++)	6.59	132
Magnesium (Mg++)	8.72	106
Sodium (Na+) (Calculated)	130.63	3,003
Iron		0.91
Carbonate (HCO ₃ -)	30.90	1,891
Carbonate (CO ₃ -)	NOT FOUND	
Hydroxide (OH-)	NOT FOUND	
Sulphate (SO ₄ -)	1.02	49
Chloride (Cl-)	113.93	4,040
7.9 pH c 68° F		
Dissolved Solids on Evap. at 103° - 105° C		
Hardness as CaCO ₃	15.31	766
Carbonate Hardness as CaCO ₃ (temporary)	30.90	1,550
Non-Carbonate Hardness as CaCO ₃ (permanent)	15.31	766
Alkalinity as CaCO ₃	30.90	1,550
Specific Gravity c 68° F	1.005	

MOORE BUSINESS FORMS INC. LA

* mg/l = milligrams per Liter

* me/l = milliequivalents per Liter

Calcium Carbonate scaling index positive at 86°F. (1.39)

Calcium Sulfate scaling index negative

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

Exhibit No. 8



# CONTINENTAL OIL COMPANY

P. O. Box 460  
HOBBS, NEW MEXICO 88240

July 29, 1970

PRODUCTION DEPARTMENT  
HOBBS DIVISION  
L. P. THOMPSON  
Division Manager  
G. C. JAMIESON  
Assistant Division Manager

1001 NORTH TURNER  
TELEPHONE 393-4141

*Case 4412*

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

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

Gentlemen:

Subject: Application for Approval to Expand Scarborough  
Yates-Seven Rivers Pressure Maintenance Project

Forwarded herewith in triplicate is our Application for approval of our proposed expansion of the Scarborough Yates-Seven Rivers pressure maintenance project. We should appreciate your placing this matter for hearing on the August 19th docket.

Very truly yours,

LPT:JM  
CC: NMOCC - Hobbs  
RLA JJB JWK  
Atlantic-Richfield  
Chevron Oil Company  
Pan American Petroleum Corp.

DOCKET MAILED

Date 8-6-70

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE  
STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF  
CONTINENTAL OIL COMPANY FOR AUTHORITY  
TO EXPAND THE SCARBOROUGH YATES-SEVEN  
RIVERS PRESSURE MAINTENANCE PROJECT  
BY CONVERTING TWO ADDITIONAL INJECTION  
WELLS IN SECTION 24, T-26S R-36E,  
LEA COUNTY NEW MEXICO

*Case 4412*

A P P L I C A T I O N

Comes now, Continental Oil Company and respectfully prays that authority be given to expand the Scarborough Yates-Seven Rivers pressure maintenance project created by Order No. R-3487-A, by the addition of two injection wells in Section 24, T-26S R-36E, Lea County, New Mexico, and in support thereof would show:

1. Applicant is operator and co-owner of the Eaves "A", Eaves "B" and McCallister "A" leases which produce oil from the Scarborough Yates-Seven Rivers Pool.
2. Order No. R-3487-A approved a pressure maintenance project for said pool and the conversion of Eaves A Well No. 10 to water injection.
3. Applicant has heretofore drilled and completed in said Scarborough Yates-Seven Rivers Pool its McCallister "A" No. 2 well at a location 330 feet from the north line 990 feet from the east line of Section 24, T-26S R-36E.
4. Applicant has heretofore drilled and completed in the Scarborough Yates-Seven Rivers Pool its McCallister "A" No. 3 well, located 660 feet from the south line and 660 feet from the east line of said Section 24.
5. Applicant now desires to inject water produced from the Scarborough Yates-Seven Rivers Pool into either or both of said wells.
6. The injection of water as proposed herein will prevent waste and will not impair correlative rights.

WHEREFORE, applicant respectfully prays that this matter be set for hearing before the commission's duly appointed examiner and upon hearing, an order be entered authorizing the expansion of the Scarborough Yates-Seven Rivers pressure maintenance project as described above.

Respectfully submitted,  
CONTINENTAL OIL COMPANY

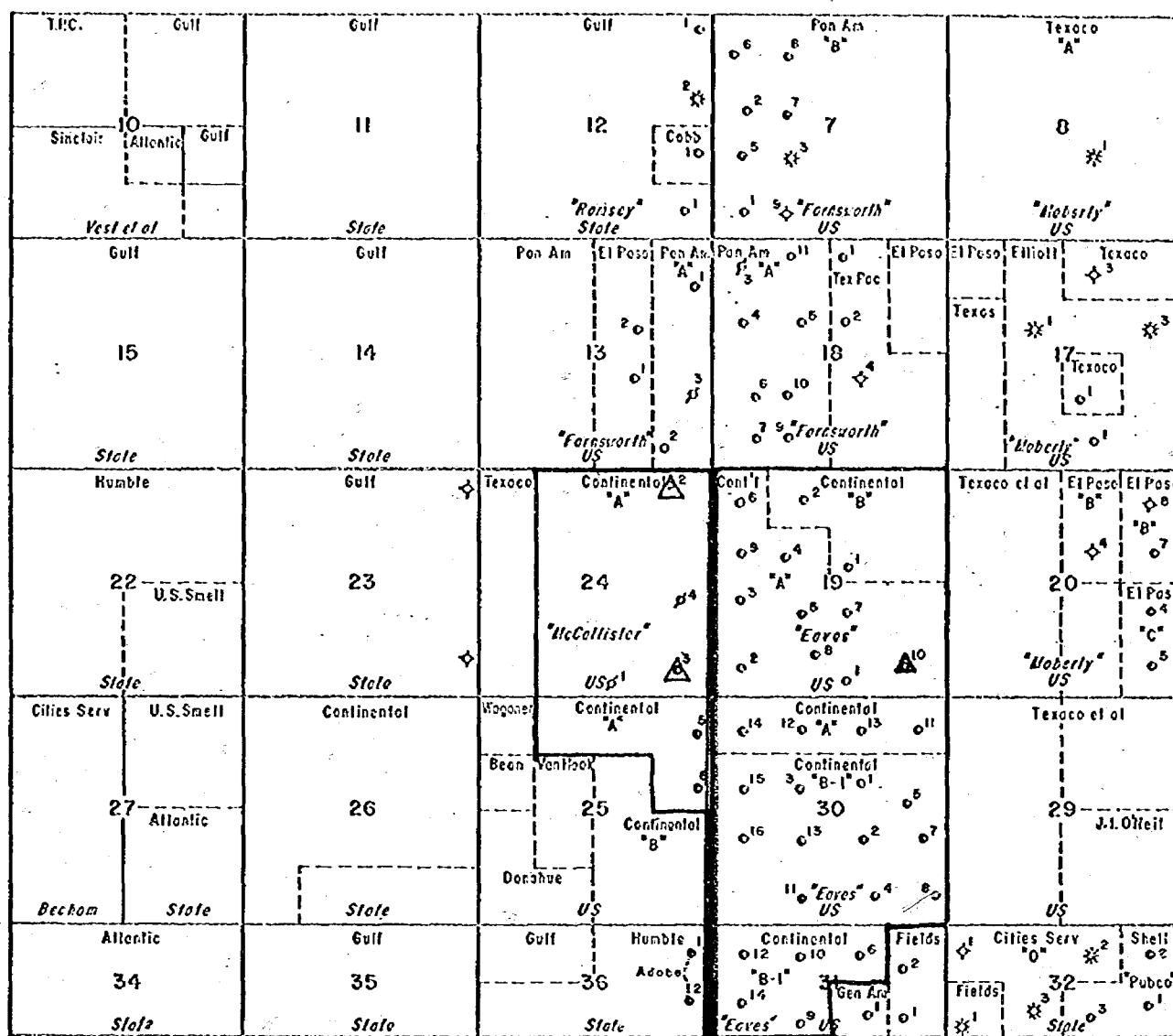


G. C. Jamieson  
Assistant Division Manager  
Of Production

GCJ:JM

R36E

R37E

T  
26  
S

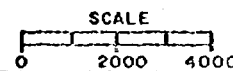
- Proposed expansion area  
 Proposed injection wells  
 Present P.M. project area  
 Present Injection well

## CONTINENTAL OIL COMPANY

PRODUCTION DEPARTMENT—HOBBS DIVISION

SCARBOROUGH POOL  
LEA COUNTY, NEW MEXICO

PRESSURE MAINTENANCE PROJECT



Case 4412



DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

*John - 11/10*  
*no spec. done*

*John*

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

CASE No. 4412

Order No. R-4026

*ASB* *John*

APPLICATION OF CONTINENTAL OIL  
COMPANY FOR A PRESSURE MAINTENANCE  
PROJECT, LEA COUNTY, NEW MEXICO.

*9-8-70*

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at <sup>9:30</sup> a.m. on August 19, 1970,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this Sept day of August, 1970, 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, Continental Oil Company, seeks  
authority to institute a pressure maintenance project in the  
Scarborough Yates-Seven Rivers Pool on its McCallister "A" Lease  
in Section 24, Township 26 South, Range 36 East, NMPM, Lea County,  
New Mexico, by the injection of water into the Yates and Seven  
Rivers formations through its McCallister "A" Well No. 2, located  
330 feet from the North line and 990 feet from the East line of  
said Section 24, and through its McCallister "A" Well No. 3,  
located 660 feet from the South line and 660 feet from the East  
line of said Section 24.

(3) That the proposed pressure maintenance project is in the interest of conservation and should result in greater ultimate recovery of oil, thereby preventing waste.

(4) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

IT IS THEREFORE ORDERED:

(1) That the applicant, Continental Oil Company, is hereby authorized to institute a pressure maintenance project in the Scarborough Yates-Seven Rivers Pool on its McCallister "A" Lease in Section 24, Township 26 South, Range 36 East, NMPM, Lea County, New Mexico, by the injection of produced salt water into the Yates and Seven Rivers formations through its following-described wells in said Section 24:

*McCallister "A" well No. 2, located 330 feet from the North line and 990 feet from the East line, injection to be accomplished through 2 3/8-inch <sup>plastic-lined</sup> tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3045 feet to 3063 feet and into the open-hole interval from 3076 feet to 3217 feet; and*

*McCallister "A" well No. 3, located 660 feet from the South line and 660 feet from the East line, injection to be accomplished through 2 3/8-inch plastic-lined tubing installed in a packer set at approximately 3010 feet, with injection into the perforated interval from 3039 feet to 3100 feet and into the open-hole interval from 3133 feet to 3245 feet.*

*(under)*

(4) That monthly progress reports of the pressure maintenance project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(5) 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.

CASE 4413: MOTION OF THE OCC TO  
PERMIT STANLEY L. JONES dba  
FRANCISCA CORP TO PLUG WELL.

0  
16  
A  
16  
16