

CASE 4246: Application of HUMBLE
OIL & REFINING FOR SALT WATER
DISPOSAL, LEA COUNTY, NEW MEXICO.

Case Number
4246

Application

Transcripts

Small Exhibits

ETC.



dearnley-meier reporting service, inc.

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
November 5, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Humble Oil & Refining)
Company for salt water disposal, Lea)
County, New Mexico.)

) Case No. 4246
)
)

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: Case 4246.

MR. HATCH: Case 4246. Application of Humble Oil & Refining Company for salt water disposal, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant and Christy, appearing on behalf of Humble. We have one witness I would like to have sworn.

(Witness sworn.)

MR. UTZ: Are there other apperances? Is there anyone here representing Anadarko? You may proceed.

(Whereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

B. K. BEVILL

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q State your name, your residence and by whom you are employed.

A B. K. Bevill, Hobbs, New Mexico, Humble Oil & Refhining Company.

Q What is your position with Humble?

A Senior production engineer.

Q Are you familiar with the application of Humble in this case?

A Yes, sir.

Q Have you previously testified before the New Mexico Oil Conservation Commission?

A I have.

Q Did you qualify as a petroleum engineer?

A Yes, sir.

Q Your qualifications as a petroleum engineer is a matter of record with the Commission?

A Yes, sir.

Q What is Humble seeking to accomplish by this application?

A This is Humble's request to re-enter our New Mexico State S 26, temporarily abandoned hole, and recomplete it as a salt water disposal well. The well was originally drilled as a Eunice South San Andres.

Q E-u-n-i-c-e.

A But, it was abandoned when no commercial production was found. We propose to drill out all the plugs and inject salt water into the present perforations.

Q What formation is that?

A In the San Andres.

Q Did Humble file an application with the Commission for administrative approval of this well as salt water disposal well?

A Yes, sir.

Q And they filed Form C 108?

A Yes, sir.

Q Then, you were advised by the Commission that it would be necessary to have a hearing --

A Yes, sir.

Q -- on the application? Have you prepared or has there been prepared under your direction certain exhibits for introduction in this case?

A Yes, sir.

Q Refer to Humble's Exhibit No. 1 and explain what this is and what it shows.

A Exhibit No. 1 is a plat of the area. The arrow -- the red arrow indicates the well in question, New Mexico State S 26, which we propose to re-enter and recomplete as a salt water disposal well.

Q What is the acreage shown in yellow?

A That's Humble's New Mexico State S Lease.

Q Do you have any further comments with respect to Exhibit 1?

A You will note in the southwest corner of Section 2 there is a black arrow pointing to a well, which is Humble's Paddock Unit Water Source Well No. 4.

This is the only well that's carried on the proration schedule in the Eunice South San Andres Pool. It was originally drilled with source water for the Paddock Unit Waterflood when it produced some oil and had to be reclassified as an oil well.

Q That was reclassified after a hearing before the Commission?

A Yes, sir.

Q Any further comments with respect to Exhibit No. 1?

A Over in the Section 33 you will see another black arrow pointing to a well. That was originally drilled in 1952 and it's --- this well has had several different classifications as producer and I think once it's a salt water injection well.

In 1961, it was recomplected as a San Andres producer and classified in the Eunice San Andres Pool. In

checking the records on it, it has not produced any oil since June of last year, 1968.

Q Why did you mention that well with reference to this injection well?

A It's the only one that I could find in the proximity of the well in question completed in the San Andres.

Q Other than the one in the southwest of the southwest of Section 2?

A Yes, sir.

Q How much oil and how much water is the well, located in the southwest of the southwest, two producing at the present time?

A Right now it produces approximately 60 barrels of oil per day along with about 3500 barrels of water.

Q And that water is being used for injection in connection with the Paddock Unit?

A The Paddock Unit Waterflood.

Q For waterflood? How much water do you propose to inject into this proposed injection well?

A We propose to inject all produced water outside of the Paddock Unit from our New Mexico State Lease into this well and also we would like to use it as a stand-by

to our New Mexico State G Lease water disposal well which handles small amounts of water from our surrounding leases.

Also, from the New Mexico State S Lease. Right now the S Lease produces roughly 35 barrels per day. In the event it is used for -- to take the place of State G Well, it would only have about 75 barrels per day right now. We probably would never produce or inject over around 200 barrels per day.

Q In your opinion will the injection of water into the San Andres Formation in this well be detrimental to any of the other wells in the area?

A No, sir.

Q Why do you say that?

A For one reason, the enormous size of the San Andres Aquifer and also the small amount of water that we intend to inject into this well.

Q Do you contemplate it would have any effect upon the producing well in the southwest of southwest of two?

A No, sir.

Q The well I have just mentioned in the southwest

southwest 2 being used as a water well for the unit, is that well owned by Humble or is it owned by the unit?

A It's owned by the unit operated by Humble.

Q And the production goes to the unit operator?

A The production is allocated to the unit operating expense, royalty to the state.

Q Do you have any further comments with respect to Exhibit No. 1?

A No, sir.

MR. UTZ: Let me clarify one point. Where is your G Lease in regard -- your G Lease?

THE WITNESS: It's approximately six miles west.

Q (By Mr. Hinkle) Directly west of two?

A Almost due west of this lease here.

MR. UTZ: And do you intend to use this well to supplement the water injection?

THE WITNESS: In case anything happened to it as a stand-by.

Q (By Mr. Hinkle) But even with that water you contemplate about 200 barrels would be the maximum to be injected?

A Yes, sir.

Q Now, refer to Exhibit No. 2.

A Exhibit No. 2 is a log of the section in question in New Mexico State S No. 26. It shows the top of the San Andres, also indicates the zones that were individually perforated and tested, giving the treatments and the best tests that were taken of each zone.

Q Is this well open below the San Andres Formation?

A No, sir.

Q Now, refer to Exhibit No. 3 and explain that to the Commission.

A Exhibit No. 3 is a schematic diagram. On the left is shown the present completion. It shows all of the perforated intervals and the bridge plugs that are in the well at present.

On the right shows how the well will be equipped when we drill out the plugs. Internally plastic-coated tubing will be set above all perforations at approximately 300 feet on a permanent packer and water injected at the bottom.

Q All of these drill -- the bridges will be drilled out --

A Yes, sir.

Q -- that are now located?

A Yes, sir.

Q By completing the well in the manner which you have indicated here by Exhibit 3, in your opinion will the injection of water be confined to the San Andres Formation?

A Yes, sir, it will.

Q Now, refer to Exhibit No. 4 and explain that.

A Exhibit No. 4 is analysis of the waters. On the left is the New Mexico S State Tank Battery No. 5, co-mingled with water, which we plan to inject into this well immediately.

You will note that the chlorides are a hundred twenty-three which has no commercial value. Over on the right side is the analysis of water taken from State S 26. You will note that the chlorides were 34,500 there and has no commercial value.

Q Now, Mr. Bevill, it has been called to our attention that Anadarko has a telegram here sent to the Commission protesting the use of this well as a salt water disposal well.

Will you point out to the Commission the acreage that is held by Anadarko in this area?

A I believe -- did that telegram say Section 11?

MR. HATCH: Yes.

THE WITNESS: What unit did it say?

MR. HATCH: Let me read the telegram. Telegram dated November 4, 1969, addressed to the Oil Conservation Commission. Re: Case No. 4246, salt water disposal application, Humble Oil.

"Anadarko opposes application to inject salt water into the San Andres Formation at any interval above 4100 feet. Anadarko plans to drill in unit C, Section 11 to test upper San Andres above 4100 and believe salt water injected above 4100 will encroach upon Section 11 location. Anadarko Production Company, C. W. Stumhoffer."

Q (By Mr. Hinkle) I believe you have already testified that in your opinion the injection of water in this well will not have any effect upon the oil well located in the southwest of the southwest of Section 2?

A That's correct.

Q Is that right? Now, the acreage referred to in the telegram is still more removed from the injection well, is it not?

A Farther south.

Q By about --

A At least one location.

Q At least one location? And your testimony applies also to that acreage, does it not?

A Yes, sir.

MR. HINKLE: I would like to offer in evidence Exhibits 1 through 4.

MR. UTZ: Without objection, Exhibits 1 through 4 will be entered into the record of this case.

CROSS EXAMINATION

BY MR. UTZ:

Q Mr. Bevill, is my understanding correct in that your water source well -- which is what, your four --

A Yes, sir.

Q -- is now producing oil and water?

A Yes, sir.

Q And you are using the water for water injection on the unit?

A Waterflood.

Q Waterflood unit? That well is between the Anadarko acreage and a subject well in this case?

A Yes, sir.

Q If any water did get down that far, chances are you would produce it, would you not?

A I don't see how any water could have a chance to get around that water source well plugging 3500 barrels a day to do any damage to their well, which is a full -- at least another full location further south.

Q Now, do you have the tops of the cement on your production string here?

A Yes, sir.

Q That's 2800, I'm sorry.

A Twenty-eight hundred feet.

Q And the packer will be set at 3800, so the cement is a thousand feet above your packer?

A Yes, sir.

Q Tubing is plastic-coated?

A Yes, sir.

Q And how about the annulus. Do you intend to load it?

A It will be loaded with treated water.

Q Are you going to install a gauge at the surface or the annulus?

A Yes, sir.

MR. UTZ: Other questions of the witness? The witness may be excused.

(Witness excused.)

MR. UTZ: Statements in this case? The case will be taken under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
B. K. BEVILL	
Direct Examination by Mr. Hinkle	2
Cross Examination by Mr. Utz	12

E X H I B I T S

Applicant's Exhibits	
1 through 4	2

Glenda Burns
NOTARY PUBLIC

I do hereby certify that the foregoing is
a complete record of the proceedings in
the Examiner hearing of Case No. 4246
heard by me on Mar 5 1969.
Richard W. [Signature] Examiner
New Mexico Oil Conservation Commission



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

November 10, 1969

Mr. Clarence Hinkle
Hinkle, Bondurant & Christy
Attorneys at Law
Post Office Box 10
Roswell, New Mexico 88201

Re: Case No. 4246
Order No. R-3869
Applicant:
Humble Oil & Refining Co.

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. 4246
Order No. R-3869

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 5, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 10th day of November, 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, Humble Oil & Refining Company, is
the owner and operator of the New Mexico "S" State Well No. 26,
located in Unit L of Section 2, Township 22 South, Range 37 East,
NMPM, adjacent to the South Eunice-San Andres Pool, Lea County,
New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres formation,
with injection into the perforated interval from approximately
3860 feet to 4020 feet.

(4) That the injection should be accomplished through
2 3/8 inch plastic-lined tubing installed in a packer set at
approximately 3800 feet; that the casing-tubing annulus should

-2-

CASE No. 4246
Order No. R-3869

be filled with an inert fluid; and that a pressure gauge should be attached to the annulus at the surface in order to determine leakage in the casing, 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:

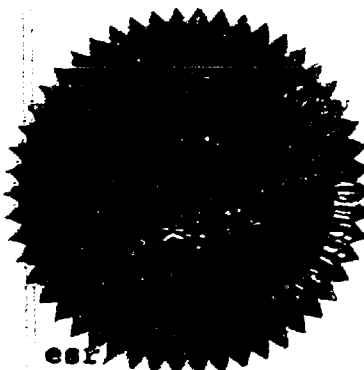
(1) That the applicant, Humble Oil & Refining Company, is hereby authorized to utilize its New Mexico "S" State Well No. 26, located in Unit L of Section 2, Township 22 South, Range 37 East, NMPL, adjacent to the South Eunice-San Andres Pool, Lea County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3800 feet, with injection into the perforated interval from approximately 3860 feet to 4020 feet;

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

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

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

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



STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

DAVID F. CARGO, Chairman

ALEX J. ARNOLD, Member

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

4246 ~~Humble~~

Leard 11-5-69

Rec. 11-5-69

Humble Humble, permission
to convert their new well -
dry hole to an SWD well.
Injection shall be thru plastic
lined 2 3/4" tubing under a
packer ^{at approx 3850'} and into San Andres
from 3860-4020 thru perf.
injection is in a dry section
offsetting the So. Texas S.A.
pool.

Thurlo. W.

I can see no reason
why this well would flood
the NE NW/4 sec. 11 since
Humble. WSW #45 well is
pumping. 3500 BWP from
the SW SW of sec. 2.

ETD

Docket No. 80-69

DOCKET: EXAMINER HEARING - WEDNESDAY - NOVEMBER 5, 1969

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

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

CASE 4243: Application of Mobil Oil Corporation for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the Vacuum-Upper Pennsylvanian Pool and the Vacuum-Middle Pennsylvanian Pool in the wellbore of its Bridges State Well No. 121 located in Unit L of Section 13, Township 17 South, Range 34 East, Lea County, New Mexico.

CASE 4244: Application of Gulf Oil Corporation for an amendment to Order No. R-1084, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-1084 to permit the simultaneous dedication of the 480-acre non-standard gas proration unit established by said order to its H. T. Mattern (NCT-E) Wells No. 10 and 11 located, respectively, 660 feet from the South line and 1980 feet from the West line of Section 1 and 1990 feet from the East line and 660 feet from the North line of Section 12, both in Township 22 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico. Applicant further seeks authority to produce the allowable assigned to said unit from either of the aforesaid wells in any proportion.

CASE 3889: In the matter of Case No. 3889 being reopened pursuant to the provisions of Order No. R-3585, which order established 160-acre spacing units and 160-acre proportional factors of 4.77 for the Middle Allison-Pennsylvanian Pool, Lea and Roosevelt Counties, New Mexico, for a period of one year. All interested parties may appear and show cause why said pool should not be developed on less than 160-acre spacing and why the 160-acre proportional factor of 4.77 should or should not be retained.

CASE 4245: Application of Texas Pacific Oil Company, Inc., for several non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the dedication and rededication of certain acreage and the establishment of the following non-standard gas proration units in Townships 22 and 23 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico:

November 5, 1969, Examiner Hearing

-2-

Docket No. 30-69

A 160-acre unit comprising the W/2 SE/4 and the E/2 SW/4 of Section 8, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 56 located in Unit F of said Section 8;

A 200-acre unit comprising the NW/4 and the NW/4 SW/4 of Section 11, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 42 located in Unit E of said Section 11;

A 280-acre unit comprising the SE/4, S/2 SW/4, and the NE/4 SW/4 of Section 11, Township 22 South, Range 36 East, to be dedicated to the State "A" a/c-2 Well No. 36 located in Unit M of said Section 11;

A 200-acre unit comprising the N/2 NE/4, the SE/4 NE/4, and the NE/4 NW/4 of Section 15 and the SE/4 SW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 31 located in Unit H of said Section 15;

A 160-acre unit comprising the S/2 NW/4, SW/4 NE/4 and the NW/4 NW/4 of Section 15, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 33 located in Unit F of said Section 15;

A 240-acre unit comprising the SW/4 of Section 3 and the N/2 NW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 35 located in Unit L of said Section 3;

A 160-acre unit comprising the S/2 NW/4 and N/2 SW/4 of Section 10, Township 23 South, Range 36 East, to be dedicated to the State "A" a/c-1 Well No. 37 located in Unit F of said Section 10.

CASE 4246: Application of Humble Oil & Refining 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 San Andres formation in the perforated interval from 3860 feet to 4020 feet in its New Mexico "S" State Well No. 26 located in Unit L of Section 2, Township 22 South, Range 37 East, South Eunice-San Andres Pool, Lea County, New Mexico.

CASE 3928: (Reopened)

In the matter of Case No. 3928 being reopened pursuant to the provisions of Order No. R-3586, which order established 80-acre spacing units for the East Shoe Bar-Devonian, 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 spacing units.

CASE 4247: Application of J. J. Travis for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the North Shugart Queen Unit Area comprising 520 acres, more or less, of federal lands in Sections 20, 21, and 28, Township 18 South, Range 31 East, Shugart (Yates-Seven Rivers-Queen-Grayburg) Pool, Eddy County, New Mexico.

CASE 4248: Application of J. J. Travis for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in his North Shugart Queen Unit Area by the injection of water into the Queen formation through nine wells at orthodox and unorthodox locations in Sections 20 and 21, Township 18 South, Range 31 East, Shugart (Yates-Seven Rivers-Queen-Grayburg) Pool, Eddy County, New Mexico. Applicant further seeks a procedure whereby additional injection wells at orthodox and unorthodox locations may be approved administratively.

CASE 4249: Application of Tenneco Oil Company for amendment of Order No. R-3822 and off-lease storage, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks amendment of Order No. R-3822, which order pooled all mineral interests in the Basin-Dakota Gas Pool underlying the N/2 of Section 11, Township 29 North, Range 13 West, San Juan County, New Mexico, to form a 320-acre gas proration unit dedicated to a well to be drilled at an unorthodox location 2250 feet from the North line and 600 feet from the East line of said Section 11. Applicant now seeks amendment of said order to permit the drilling of said well at a point 2390 feet from the North line and 275 feet from the East line of said Section 11. Applicant further seeks authority to transport, prior to measurement, to another lease for storage the liquid hydrocarbons produced by the subject well.

CASE 3455: (Reopened):

In the matter of Case No. 3455 being reopened pursuant to the provisions of Order No. R-2565-B, which order, among other things, established 320-acre spacing units for the West Puerto Chiquito-Mancos Oil Pool, Rio Arriba County, New Mexico, for a period of three years. All interested parties may appear and show cause why said pool should not be developed on 40-acre spacing units.

November 5, 1969, Examiner Hearing

Docket No. 30-69

-4-

CASE 4250: Application of McCrary & Franklin for waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project by the injection of water into the Grayburg and Lovington sands through their Shipley Well No. 2 located in Unit K of Section 3, Township 17 South, Range 29 East, Square Lake Pool, Eddy County, New Mexico.

CASE 4251: 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 by the injection of water into the Queen formation through its Welch Well No. 2 located in Unit G of Section 4 and its Welch Well No. 4 located in Unit C of Section 4, both in Township 19 South, Range 31 East, Shugart Pool, Eddy County, New Mexico.

CASE 4220: (Continued from the October 8, 1969, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit E. P. Campbell, and all other interested parties to appear and show cause why the E. P. Campbell Christmas Well No. 1 located in Unit C of Section 6, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.



Telegram

LA064 NSB376

1969 NOV 4 PM 4 06

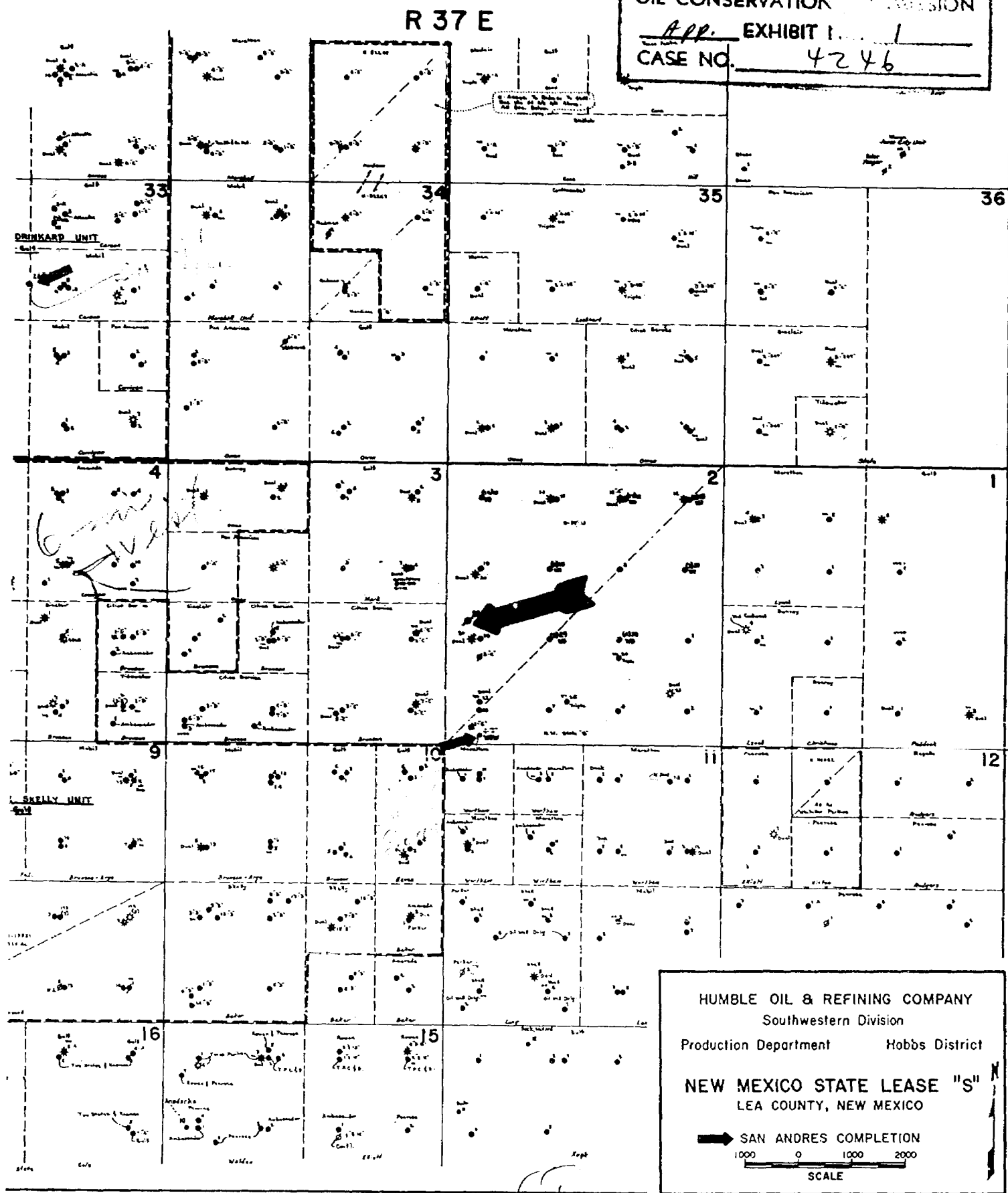
NS FWB261 TM PDB=FAX FORT WORTH TEX 4 304P CST=
NEW MEXICO OIL CONSERVATION COMMISSION=

: STATE LAND OFFICE BLDG SANTA FE NMEX=

RE: CASE NO. 4246, SALT WATER DISPOSAL APPLICATION,
HUMBLE OIL. ANADARKO OPPOSES APPLICATION TO INJECT
SALT WATER IN THE SAN ANDRES FORMATION AT ANY INTERVAL
ABOVE 4,100 FEET. ANADARKO PLANS TO DRILL IN UNIT C,
SECTION 11 TO TEST UPPER SAN ANDRES ABOVE 4,100 AND
BELIEVES SALT WATER INJECTED ABOVE 4,100 WOULD ENCROACH
UPON SECTION 11 LOCATION=

ANADARKO PRODUCTION CO C W STUMHOFFER==

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
APP. EXHIBIT 1
CASE NO. 4246



HUMBLE OIL & REFINING COMPANY

NEW MEXICO "S" STATE NO. 26

SOUTH EUNICE SAN ANDRES

Present Completion

Proposed Completion
for Salt Water Disposal

Cement to Surface

298' - 8-1/2" - 24# J-55 set at 311'

Cement to 2800'

2-3/8" EUE Tubing
Internally Plasticcoated

Baker Model "D" Packer at 3800'
w/Latch in Type Seal Assembly

3860' 1 shot/ft.
3867'

Drillable Bridge
Plug at 3900'

3920' 1 shot/ft.
3928'

Drillable Squeeze
Retainer at 3935'

3941' 1 shot/ft.
3948'

Squeezed w/
34 sx. cmt.

Drillable Bridge
Plug at 3962'

3969' 1 shot/ft.
3981'

Drillable Bridge
Plug at 3990'

4005' 1 shot/ft.
4020'

BEFORE EXAMINER UTZ
OIL CONSERVATION COMMISSION
App. EXHIBIT NO. 3
CASE NO. 4246

4139' - 4-1/2" - 9.5# J-55 set at 4150' T.D.

HUMBLE OIL & REFINING COMPANY

NEW MEXICO "S" STATE LEASE

	<u>New Mexico "S" State Bat. 5 Commingled Water*</u>	<u>New Mexico "S" State 26 Produced Water</u>
Res.	.054 @ 70°F	140 @ 80°F
Sp. G.	1.140	1.040
pH	5.7	6.7
Ca	16,500	3,700
Mg	3,900	1,140
Cl	123,500	34,500
SO ₄	900	410
HCO ₃	61	730
Fe	15	None

*Producing Zones:
 Drinkard
 Blinbry
 Wantz Abo
 Wantz Granite Wash

BEFORE EXAMINER UTZ
 OIL CONSERVATION COMMISSION
App. EXHIBIT NO. 4
 CASE NO. 4246

(4)

OCT 9 1969

HUMBLE OIL & REFINING COMPANY

P. O. Box 1600
Midland, Texas 79701
September 26, 1969

Set for hearing

Re: Request to Complete New Mexico "S"
State 26 as a Salt Water Disposal Well

Case 4246

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

Attn: Mr. A. L. Porter, Jr., Secretary-Director

Gentlemen:

Humble Oil & Refining Company respectfully requests administrative approval to complete its New Mexico "S" State 26 as a salt water disposal well in the San Andres reservoir. The well is located in Unit L, Section 2, T-22-S, R-37-E, Lea County, New Mexico. It was recently drilled as a prospective oil producer in the South Eunice San Andres Pool. Each porous zone in the San Andres was thoroughly tested and proved noncommercial.

It is proposed to dispose of all water produced on Humble's New Mexico "S" State Lease, which currently amounts to about 35 barrels per day. It is also proposed to utilize this well to augment capacity to our New Mexico "G" State 17 disposal well (Order R-3462), if needed at some future date.

If for some reason administrative approval cannot be granted, please place our request on the earliest docket for hearing.

Yours very truly,

HUMBLE OIL & REFINING COMPANY

L. H. Byrd
L. H. Byrd

414 - 2 - 223 - 376

*Produced from well
during June 1967*

2067 176

DOCKET MARKED

Date *10-24-69*

Form C-108
Revised 1-1-65

OCT 9

1969

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

OPERATOR Humble Oil & Refining Company		ADDRESS P. O. Box 2100, Hobbs, New Mexico 88240	
LEASE NAME New Mexico "S" State	WELL NO. 26	FIELD Eunice San Andres South	COUNTY Lea
LOCATION UNIT LETTER <u>L</u> WELL IS LOCATED <u>2310</u> FEET FROM THE <u>South</u> LINE AND <u>400</u> FEET FROM THE <u>West</u> LINE, SECTION <u>2</u> TOWNSHIP <u>22-S</u> RANGE <u>37-E</u> NMPM. <u>Lea County, New Mexico</u>			
CASING AND TUBING DATA			
NAME OF STRING	SIZE	SETTING DEPTH	SACKS CEMENT
SURFACE CASING	8-5/8"	311	150
INTERMEDIATE			
LONG STRING	4-1/2"	4150	400
TUBING	2-3/8"	3800	NAME, MODEL AND DEPTH OF TUBING PACKER Baker Model "D" set at 3800'
NAME OF PROPOSED INJECTION FORMATION San Andres		TOP OF FORMATION 3840	BOTTOM OF FORMATION 4150
IS INJECTION THROUGH TUBING, CASING, OR ANNULUS? Tubing		PERFORATIONS OR OPEN HOLE? Perforations	PROPOSED INTERVAL(S) OF INJECTION 3860' to 4020'
IS THIS A NEW WELL DRILLED FOR DISPOSAL? No	IF ANSWER IS NO, FOR WHAT PURPOSE WAS WELL ORIGINALLY DRILLED? New well - drilled as prospective 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 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 Paddock
ANTICIPATED DAILY INJECTION VOLUME (BBL/S.) 35 B/D	MINIMUM 1000 B/D	MAXIMUM Closed	IS INJECTION TO BE BY GRAVITY OR PRESSURE? Gravity
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 -		WATER TO BE DISPOSED OF Yes	NATURAL WATER IN DISPOSAL ZONE Yes
NAME AND ADDRESS OF SURFACE OWNER (OR LESSEE, IF STATE OR FEDERAL LAND) Pete Stephens, 921 Ave. G, Eunice, New Mexico		APPROX. PRESSURE (PSI) -	
LIST NAMES AND ADDRESSES OF ALL OPERATORS WITHIN ONE-HALF (1/2) MILE OF THIS INJECTION WELL			
Gulf Oil Company, 900 N. Turner, Hobbs, New Mexico			
Cities Service Oil Company, Broadmoor Building, Hobbs, New Mexico			
Marathon Oil Company, Broadmoor Building, Hobbs, New Mexico			
HAVE COPIES OF THIS APPLICATION BEEN SENT TO EACH OF THE FOLLOWING?		SURFACE OWNER Yes (State)	
ARE THE FOLLOWING ITEMS ATTACHED TO THIS APPLICATION (SEE RULE 701-B)		EACH OPERATOR WITHIN ONE-HALF MILE OF THIS WELL Yes	
PLAT OF AREA Yes		ELECTRICAL LOG Yes	
		THE NEW MEXICO STATE ENGINEER -	
		DIAGRAMMATIC SKETCH OF WELL Yes	

BKB/mcb

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

G. L. Carpenter
(Signature)

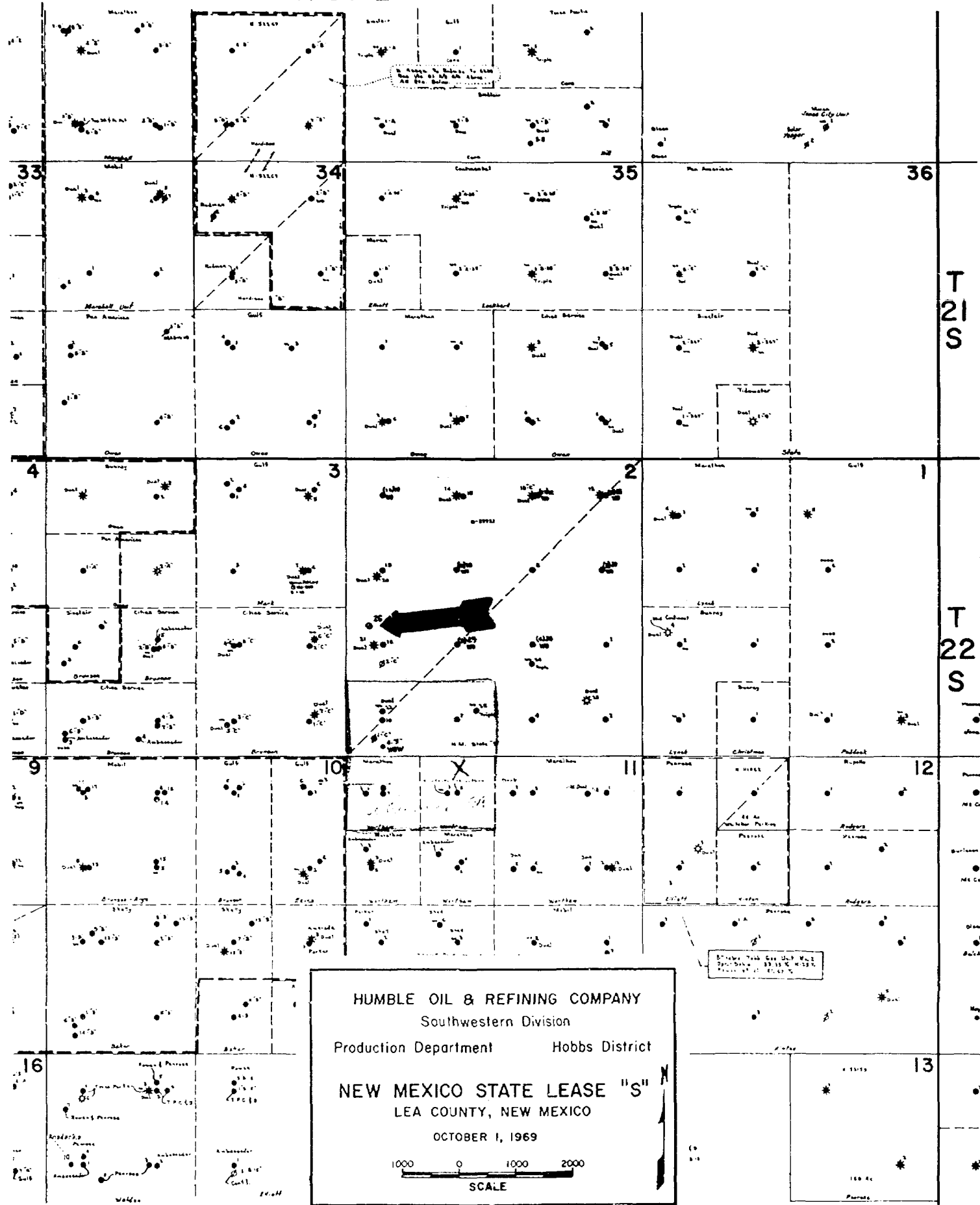
District Chief Engineer
(Title)

October 6, 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.

Line 4246

R 37 E



HUMBLE OIL & REFINING COMPANY
NEW MEXICO "S" STATE NO. 26

TOP SAN ANDRES

3800

3900

4000

500 Gallons Acid
Tested 100% Water

1500 Gallons
Acid
Tested 98% Water

1500 Gallons Acid
Tested 98% Water

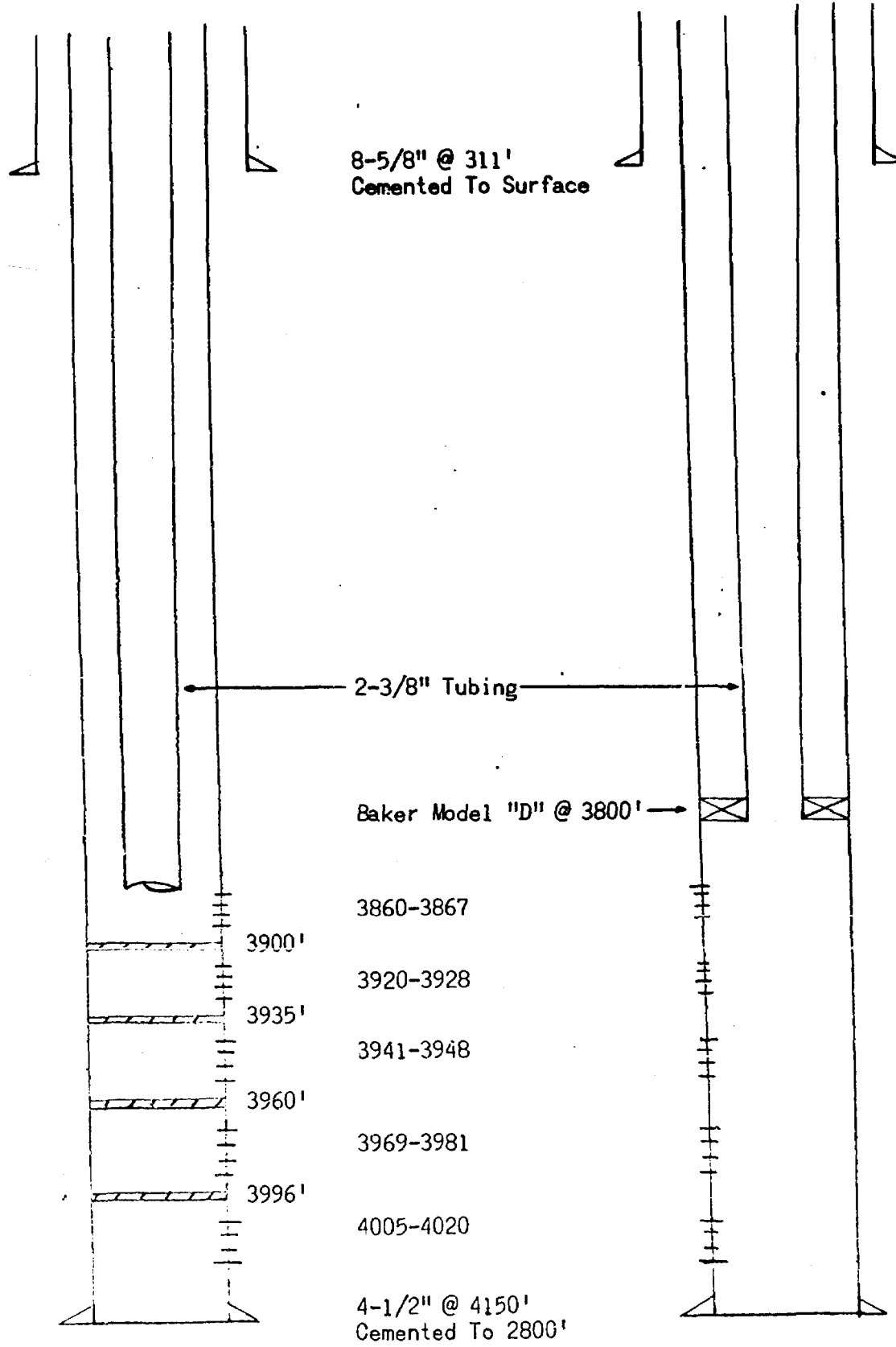
1500 Gallons
Acid
Tested 100%
Water

HUMBLE OIL & REFINING COMPANY

NEW MEXICO "S" STATE NO. 26

Present Completion

Proposed Completion



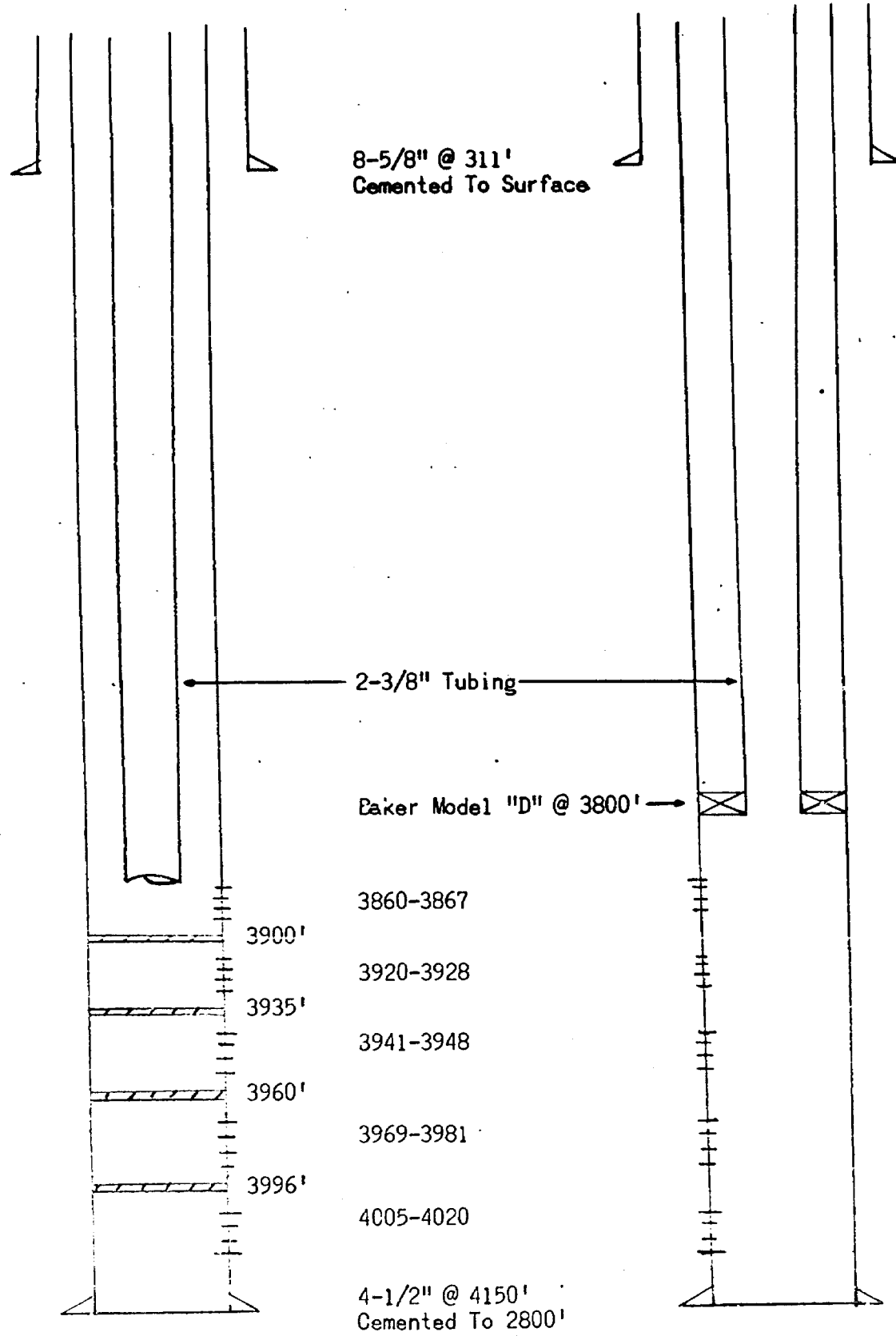
HUMBLE OIL & REFINING COMPANY

NEW MEXICO "S" STATE NO. 26

Good
4/24/6

Present Completion

Proposed Completion



DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE No. 4246

Order No. R- 3867

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR SALT WATER DISPOSAL, LEA
COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on November 5, 1969,
at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this _____ day of November, 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, Humble Oil & Refining Company,
is the owner and operator of the New Mexico "S" State Well No. 26,
located in Unit L of Section 2, Township 22 South, Range
37 East, NMPM, adjacent to the South Eunice-San Andres Pool, Lea
County, New Mexico.

(3) That the applicant proposes to utilize said well to
dispose of produced salt water into the San Andres
formation, with injection into the perforated interval
from approximately 3860 feet to 4020 feet.

(4) That the injection should be accomplished through
2 3/8-inch plastic-lined tubing installed in a packer set at

approximately 3800 feet; that the casing-tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus ~~or the annulus left open~~ at the surface in order to determine leakage in the casing, tubing, or packer.

(5) That approval of the subject application will prevent the drilling of unnecessary wells and otherwise prevent waste and protect correlative rights.

IT IS THEREFORE ORDERED:

(1) That the applicant, Humble Oil & Refining Company, is hereby authorized to utilize its New Mexico "S" State Well No. 26, located in Unit L of Section 2, Township 22 South, Range 37 East, NMPM, ^{*adjacent to the*} South Eunice-San Andres Pool, Lea County, New Mexico, to dispose of produced salt water into the San Andres formation, injection to be accomplished through 2 3/8-inch tubing installed in a packer set at approximately 3800 feet, with injection into the perforated interval from approximately 3860 feet to 4020 feet;

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

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

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

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