

CASE 4065: Appli. of HUMBLE FOR
UNORTHODOX OIL WELL LOCATION &
RECLASSIFICATION OF A WATER WELL
TO AN OIL WELL.

Case Number

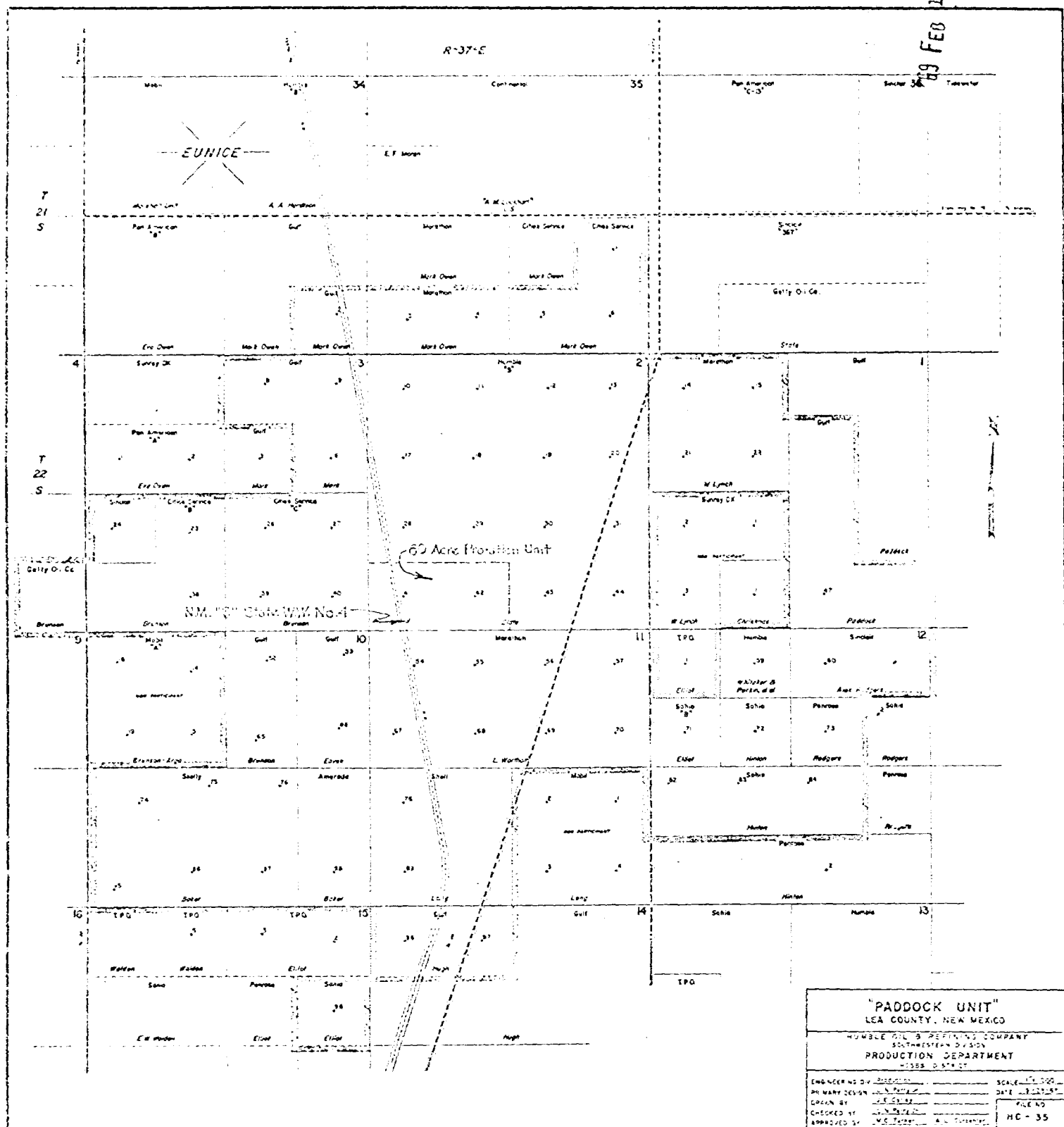
4065

Application

Transcripts.

Small Exhibits

ETC.



CP 427
1/4 1/4 1/4 Loc

TD 4900

initial
24 hr test
6/80 BW
100' BO

have spent
130,000 of unit
money trying to
develop with source
& eliminate oil

need 6000 BWP.D for
unit

175' FS
650' FWL

Paddock
San Angelo
Boundary

not in
unit

1 acre ruler
80 ac 3pc9 - N/2 & S/2
80 ac 2pc9 - allow abcs
locations: either 40
no closer than 530 to outer
boundary

with exception
for subj
well

PADDOCK UNIT	
LEA COUNTY, NEW MEXICO	
HUMBLE OIL & REFINING COMPANY	
EDITH CAMPBELL	
PRODUCTION DEPARTMENT	
WINDS 3-10-57	
ENGINEERING BY	SCALE
NO. 1000	DATE
DRAWN BY	FILE NO.
CHECKED BY	NC-35
APPROVED BY	

S. Eunice - San Angelo

APPL
4065

HUMBLE OIL & REFINING COMPANY
CUMULATIVE OIL, GAS & WATER PRODUCTION - HUMBLE

POOL: SOUTH EUNICE-SAN ANDRES

Lease & Well No.

NEW MEXICO "S" STATE WATER
SOURCE WELL 4 (CP-427)

MONTH	OIL PRODUCTION	CUMULATIVE OIL PRODUCTION	HP OR LP GAS PRODUCTION	CUMULATIVE GAS PRODUCTION	BBLs. WATER	CUMULATIVE BBLs. WATER
1968						
Jan.			HUMBLE EXHIBIT NO. 4			
Feb.			Date 3-4-70			
Mar.			Case 4065			
Apr.						
May						
June						
July						
Aug.	651	651	0		0	
Sept.	0	651	0		0	
Oct.	706	1,357	0		0	
Nov.	691	2,048	0		0	
Dec.	1,042	3,090	0		0	
1969						
Jan.	0	3,090	0		0	
Feb.	0	3,090	0		0	
Mar.	892	3,982	0		44,047	44,047
Apr.	2,083	6,065	949	949	55,778	99,825
May	2,069	8,134	1,606	2,555	55,403	155,228
June	2,067	10,201	1,512	4,067	55,350	210,578
July	2,107	12,308	1,642	5,709	56,421	266,999
Aug.	2,026	14,334	1,185	6,894	54,252	321,251
Sept.	2,066	16,400	1,479	8,373	55,323	376,574
Oct.	2,399	18,799	1,642	10,015	64,240	440,814
Nov.	2,564	21,363	1,837	11,852	68,658	509,472
Dec.	2,599	23,962	1,718	13,570	69,595	579,067
Est. Jan.	2,416	26,378	1,552	15,122	64,695	643,762
Feb.	2,330 (7.5%)	28,708 (3.9%)	1,490	16,612 (GOR 579)	64,120	707,882
Mar.	(83 BPD)				(2300 BPD)	
Apr.						
May	DRILL & COMPLETE COST:			\$106,000		
June	W/O to Sq. Cmt. Oil Zones:			20,000		
July	Oil Removal Equipment (Installation)					
Aug.	Coalescer			20,800		
Sept.	Up-Flo Filter & Metering Equipment			7,600		
Oct.				\$154,400		
Nov.						
Dec.	OPERATING EXPENSE (REPAIRS PER YEAR)					
Jan.	130 H.P., 960 Volt, 70 Amp., Reda (18 Hrs. Per Day)					
Feb.	Power:			\$ 8,900		
Mar.	Repairs:			7,800		
Apr.	Upflow Filter Servicing & Repairs			8,400		
May				\$ 25,100	(\$2100/Mo. ; \$70/Day)	
June	A San Andres oil well w/conventional art. lift					
July	(oprtg. exp.)			\$ 1,700	(\$140/Mo. ; \$5/Day)	
Aug.						
Sept.	NEW MEXICO "S" STATE 26					
Oct.	\$43,300 Non-Commercial San Andres Oil Well					
Nov.	Pumped from 4 different sources with 184 pump @ approximately 300 BFPD (3% Oil)					
Dec.	generated to S.					

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
March 4, 1970

EXAMINER HEARING

IN THE MATTER OF:

Case No. 4065 being reopened
pursuant to the provisions of
Order No. R-3706, which order
established 80-acre spacing
units for the South Eunice-San
Andres Pool, Lea County, New
Mexico, for a period of one
year.

CASE NUMBER

4065

BEFORE:

DANIEL S. NUTTER, Examiner

TRANSCRIPT OF HEARING

MR. HATCH: The Hearing will come to order,
please.

MR. NUTTER: For the benefit of anyone that may
be interested, Case 4318 will be heard later today and we
will start this morning with Case 4065.

MR. HATCH: In the matter of Case No. 4065 being
reopened pursuant to the provisions of Order No. R-3706,
which order established 80-acre spacing units for the South
Eunice-San Andres Pool, Lea County, New Mexico, for a period
of one year.

MR. HINKLE: Clarence Hinkle, Hinkle, Bondurant
and Christy, Roswell, representing Humble. We have one
witness I would like to have sworn.

(Witness sworn.)

A. L. CARPENTER

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

DIRECT EXAMINATION

BY MR. HINKLE:

Q Will you state your name?

A A. L. Carpenter.

Q By whom employed?

A Humble Oil and Refining Company.

Q What capacity?

A District Chief Engineer.

Q Have you ever testified before the Commission?

A Yes, sir.

Q And qualified as an engineer?

A Yes, sir.

Q Are your qualifications a matter of record with the Commission?

A Yes, sir.

Q Did you testify previously in connection with Case Number 4065 about a year ago?

A Yes, sir. I was a witness.

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

A Yes, sir.

(Whereupon, Exhibit Number 1 was marked for identification.)

Q Refer to Exhibit Number 1 and explain what this is and what it shows.

A Exhibit Number 1 is a map or a plat depicting the subject area which is almost in the center of the Paddock-San Angelo Unit, the unit parameter shown in green and the subject New Mexico "S" State Water Source Well Number 4

encircled in red. And this plat also shows the three oil venture attempts that were made since last year.

Q What did Order Number R-3706 in Case 4065 provide?

A Well, it provided for reclassification of the New Mexico "S" State Water Source Well Number 4 which is located 175 feet from the south line, 650 feet from the west line, Section 2, Township 22 South, Range 37 East, Lea County, New Mexico. It provided for its reclassification.

Q Why was it necessary to reclassify it?

A Well, we drilled it as a water source well for the double 80-acre five spot Paddock waterflood pilot. We did need to reclassify it as an oil well so that we could produce the oil that accompanied the water. We also asked for an exception to Rule 104 for an unorthodox location. We asked for the establishment of special pool rules including 80-acre spacing, allowables and proration units and a discovery allowable for this subject water well. The 80-acre proration units were requested to run east-west with two per quarter section, that is, the north half and the south half of each quarter section would be an 80-acre proration unit. And we also asked that the operators be allowed to drill in either 40-acre tract of each 80-acre east-west proration unit with wells being located no closer than 330 feet from any 40-acre tract

boundary. And as counselor had said awhile ago, the Commission did grant this by Order R-3706.

Q Has this well proved sufficient to provide water for your Paddock unit?

A Yes, providing the oil allowable is sufficient enough to prevent curtailment of its water production.

Q What do you mean by that, "curtailment of its water production"?

A Well, since it's been reclassified as an oil well, you have to look to the allowable in regard to its classification and this well is capable of 6,000 barrels of water a day for the pilot flood, but along with this water, it also produced about 100 barrels of oil a day, which was just a little over one per cent oil. Now, early high pressures in the northeast injectors in the pilot made it necessary for us to reduce injection until we get this problem solved. But the well still produced more than 80 barrels of oil a day even at half of the desired injection rate.

Q So, you have a problem as far as overproduction in allowable is concerned?

A Yes, sir. If it is not kept on an 80-acre allowable.

Q Have you tried to eliminate the oil production

from this well?

A Yes, sir. We made two -- we spent \$20,000 attempting to squeeze the oil off on two separate attempts.

Q In your opinion, would you have to continue to produce the oil to get the water that's necessary for the waterflood?

A Yes, sir, sure will.

Q Who owns the oil in this case, was it the unit well or is it owned individually by Humble?

A Well, the original water rights were obtained from the State Engineer under CP-427 in the name of the unit, but the reservoir is not unitized. It's Humble's reservoir, but due to the fact this expensive well was drilled to supply water for the waterflood, we saw fit to give this oil production to the unit and it is being credited to the working interest owners in the Paddock unit, although the reservoir is not yet tied in.

Q Has Humble done any further exploratory work in the area, as far as this zone is concerned?

A Yes, sir. We spent \$43,300 drilling and testing New Mexico "S" State 26. If you will refer to the plat, you can see it's a direct north offset to the water source well. Shall I read the location to you?

Q Yes. Go ahead.

A It's located 2310 from the south line and 400 feet from the west line of Section 2, Township 22 South, Range 37 East.

Q Was this successful in completing it as an oil well?

A No, sir. We selectively perforated, stimulated and tested four different intervals above the top zone in our water source well 4, but we were unable to make a commercial completion. Using conventional artificial means, we were able to pump in the range of 300 barrels of fuel per day, but it was only three per cent oil. We have since converted this well to salt water disposal service to handle the non-unit Humble production from the other reservoirs on this lease.

Q It's a dry hole, as far as oil is concerned?

A Yes.

Q Has Humble drilled any other wells in this pool?

A Humble hasn't.

Q Have any of the other companies?

A Yes, sir. Two of them have. Cities Service had a similar unsuccessful experience to ours on our "S"-26 on their--

Q Where is it located, "C"-9?

A Which is located 1880 feet from the south line and 1980 feet from the east line on their Brunson, Section 3, Township 22 South, Range 37 East. This makes it a direct west offset to our "S"-26. As of yesterday morning, they had just set a bridge plug. They set a bridge plug just above the top of the San Andres and they're studding the upper horizon.

Q So, that's a dry hole, also?

A Yes, sir, in the San Andres.

Q What other wells have been drilled?

A Anadarko has just completed their Wortham "B"-3. It is located 330 feet from the north line and 2310 feet from the east line of Section 11, Township 22 South, Range 37 East, which makes it a direct east offset to our water source well number 4, and they set seven-inch casing and are lifting it with a Reda pump. On initial potential, it pumped 188 barrels of oil plus 912 barrels of water.

Q What performance have you had in connection with the Humble water well and oil well?

A Well, since completion, it's produced 28,700 barrels of oil and 16,612,000 cubic feet of gas which is being credited to the Paddock Unit, although this reservoir is not

unitized, along with 707,900 barrels of water for injection into the Paddock Unit double, 80-acre five spot waterflood pilot. This cumulative fluid production of 736,590 barrels amount to 3.9 per cent oil with an overall gas-oil ratio of 579 cubic feet per barrel, and a gas-fluid ratio of only twenty-three cubic feet per barrel.

Q From an engineering standpoint, what does this indicate to you?

A Well, it indicates to me that the movable oil saturation in this well's completion intervals approximates only about four per cent and that most probably this well is draining much more than forty acres. Coupled with the conventional oil development attempts to the north by Humble and to the west by Cities Service, it indicates that the area of commercial oil development in the vicinity of Water Source Well 4 will be extremely limited if there is any at all.

Q What do you mean by "limited"?

A Well, admittedly, Anadarko's Wortham "B"-3 potentialized at about seventeen per cent oil which is way above the current top 80-acre allowable of 144 barrels per day. But they had to set seven-inch casing so they could lift it with a Reda pump. This ran their well cost up, I would estimate, to relatively twice as much as our attempted completion, and

their lifting cost, I think, will be extremely high. Further, they're going to have the additional expense of disposing of 900 barrels of water per day back into the basal San Andres in their Walden 4 which is almost two miles south southwest of their producer.

It's not shown on the map, but it's right in the corner of the map there in that southwest quarter. It's in the northeast quarter of the southwest quarter of Section 15. They are putting their water in below 4100 which we think is real good operational procedure.

Q You indicate, then, that it is normally going to cost more to drill and complete these wells than it would normally a well in the San Andres on 40 acres?

A Yes, sir.

Q You might explain that further.

A Historically speaking, including the installation of a Coalescer and an up-flow filter to adequately remove the oil from our source water so that it will not plug our injection wells, the drilling and equipment of our water source has cost \$154,400 so far. The power charges along with repairs to the Reda, have our operating expenses at \$25,100. This amounts to \$2,100 per month or \$70 a day which is about fourteen times greater than the operating expenses of a normal

San Andres oil well lift conventionally at this depth.

They run about \$1700 a year or about \$140 a month or \$5 a day, and a conventional normal San Andres oil well has a top allowable this month of about seventy-two barrels of oil a day usually with minimal salt water disposal costs.

So, you can see if our goal was not producing this water for the waterflood, this well's operation would be a very poor business operation.

(Whereupon, Exhibit Number 2 was marked for identification.)

Q Now, refer to Exhibit Number 2 and explain what this is and what it shows.

A Exhibit 2 is a log showing the San Andres section in the subject water well and it also shows the carefully selected perforated interval and stimulation stages. And if you will note the top three intervals, it shows that they were also squeezed twice in an attempt to get rid of the oil out of this well.

Q Where, in your opinion, is the oil coming from that you are producing in this well?

A Well, based on some very recent work by their operators, there seems to be a real good chance that most of

it is coming out of the top two sections that were squeezed off twice and may be the porosity interval ~~above~~ that right about 4,000 feet which we didn't perforate in this well.

But we did perforate in "S"-26 and we recovered more oil out of it, even though it wasn't commercial, we got more oil out of that zone, anyway. And I think Anadarko pretty well bracketed those intervals in their well.

(Whereupon, Exhibit Number 3
was marked for identification.)

Q Now, refer to Exhibit 3 and explain that.

A That is a log section on our New Mexico "S" State 26 showing the San Andres intervals. It shows the four zones that were perforated, stimulated and tested.

(Whereupon, Exhibit Number 4
was marked for identification.)

Q Now, refer to Exhibit 4 and explain what this is and what it shows.

A Exhibit 4 is a tabulation on our company form showing the production history on this well since completion.

Along the bottom line where we estimated February, you will note that over in the cumulative columns the 28,780 barrels of oil is 3.9 per cent oil relative to the total volume produced. The bottom, about the bottom third of that

exhibit tabulates this investment cost as well as the operating expense data that I just got through talking about.

Q In your opinion, from your study of this area, the testimony that you have given, will one well effectively and efficiently drain 80 acres in this area?

A Yes, sir.

Q In your opinion, is it economically feasible to develop this area on 40-acre spacing?

A No, sir.

Q What is your recommendation to the Commission with respect to continuing these rules?

A Well, on the basis of my testimony and our need for the water to implement the \$10,000,000 Paddock Unit waterflood, I hope I have shown cause why 80-acre spacing units and Rule 6 of Order Number R-3706 should be adopted permanently.

Q You recommend, in other words, that the temporary rules be made permanent?

A Yes, sir.

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

MR. NUTTER: Applicant's exhibits 1 through 4 will be admitted in evidence.

(Whereupon, Exhibit Numbers
1 through 4 were offered and
admitted in evidence.)

MR. HINKLE: That's all we have.

CROSS-EXAMINATION

BY MR. NUTTER:

Q Mr. Carpenter.

A Yes, sir.

Q You are still operating the pilot injection project
in this unit?

A Yes, sir.

Q How many wells are included in that pilot as
injection wells?

A Six.

Q Is it about time to expand the pilot or do you
have any plans for expansion of it?

A No, sir. At the 600-barrel-a-day injection rate
our calculations indicate that it would take four years to
get fillup and it was agreed in the document that we would
definitely evaluate the pilot before we expanded the floor
because the San Angelo has never been successfully flooded
anywhere and it is a pretty sticky assignment and that's the
reason it took thirteen years to put it together.

Q So, in other words, you are still in the initial

stages of attempting fill-up?

A Yes, sir.

Q And you will be producing this amount of water from this water supply well for at least three more years in order to get fill-up?

A Yes, sir. Longer than that, at the rate. Right now we are at half rate and we have been there about a year and we hope to have the problem solved within the next two or three months, so it will be three years when we get the problem solved.

Q In the meantime, you will be needing some water produced from this well?

A Yes.

MR. NUTTER: Are there any further questions of the witness: He may be excused.

(Witness excused.)

MR. NUTTER: Does anyone have anything they wish to offer in Case 4065?

MR. KELLAHIN: Jason Kellahin, Kellahin and Fox, Santa Fe, and appearing for Anadarko Production Company. We have one witness we would like to put on.

(Whereupon, Anadarko's Exhibit Number 1 was marked for identification.

(Witness sworn.)

C. W. STUMPHOFFER

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

DIRECT EXAMINATION

BY MR. KELLAHIN:

Q Would you state your name, please?

A C. W. Stumphoffer.

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

A I am employed by Anadarko Production Company, Fort Worth, Texas, as Superintendent of the Secondary Recovery Division.

Q Have you ever testified before the Oil Conservation Commission and made your qualifications a matter of record?

A Yes, I have.

Q Are you familiar with the establishment of the South Eunice-San Andres field and the temporary field rules that were established for that field by the Oil Commission Order Number R-3706?

A Yes, I am.

Q Now, referring to what has been marked as Anadarko's Exhibit Number 1, would you identify that exhibit?

A Exhibit Number 1 is a map of the South Eunice-

San Andres field area showing all the San Andres tests that have been drilled and completed to date.

Q How are the San Andres tests shown on this exhibit?

A The San Andres tests are shown with a triangle around the well location.

Q Now, has Anadarko Production Company completed any wells in the San Andres field?

A Yes, we have. We have drilled and completed two wells in the South Eunice-San Andres field. They are Hugh Number 13, located in the northwest quarter of the northwest quarter of Section 14, Township 22 South, Range 37 East, that was completed during October of 1969, with a potential of forty-five barrels of oil per day, 1300 barrels of water per day, with a GOR of 3335 to one.

Wortham "B"-3 was our second well, located in the northwest quarter of northeast of Section 11, Township 22 South, Range 37 East, completed during February of 1970, with a potential of 188 barrels of oil per day, 912 barrels of water per day, with a producing GOR of 1915 to one.

Q What is the present status of these two wells?

A Hugh Number 13 has been temporarily abandoned, after producing less than 1,000 barrels of oil. Production rates from this well rapidly declined below the economic limit

with total fluid production at the rate of approximately 500 barrels per day, with a three to four per cent oil cut at the time of abandonment.

Wortham "B"-3 is just now being placed on production.

Q What is the cost to drill and equip a well in this reservoir?

A Approximately \$90,000 which is primarily due to the need for larger diameter casing and high volume artificial lift equipment.

Q What is the cost of operation for a well of this type?

A Approximately \$1500 per month, which is primarily due to the high cost of operating the submergible Reda pump, the high cost of maintenance of this type of pump and the cost of salt water disposal into the Well Number 4 located in the northeast of the southwest of Section 15, 22 South, 37 East.

Q That's the same well as to which Humble's witness testified, is that correct?

A Yes.

Q How much area do you feel is productive from the San Andres in this reservoir?

A We feel that the commercially recoverable oil from the San Andres in this field will be confined to a relatively small area around Humble's water supply well Number 4 on their New Mexico State "S" lease and Anadarko-Wortham "B" number 3.

These two wells are structurally higher than other wells that tested the San Andres and from what information we have, this structural position apparently has an effect on the porosity development in the San Andres.

Q Do you feel that 80-acre spacing in this field will adequately drain this reservoir?

A We feel that in view of the reservoir conditions and the producing characteristics of the reservoir, it will recover the maximum amount of economic oil.

Q Didn't Anadarko Production Company apply for and receive an exception to the pool rules in order to dedicate forty acres to their Wortham "B" number 3 well?

A Yes, we did. This was a temporary measure so that we could comply with the field rules to lay the 80-acre proration units in an east and west direction. We are proceeding with some unitization work and the 40-acre allowable was requested so that we could produce the well on a temporary basis.

Q You are in the process of communitizing an 80-acre unit, is that correct?

A We are in the process of communitizing the northeast quarter of Section 11 160 acres.

Q Which would then give you two 80-acre units?

A That is correct.

Q Do you concur with Humble's request to make 80-acre spacing for the South Eunice-San Andres field permanent?

A Yes, we do.

Q Was Exhibit 1 prepared by you or under your supervision?

A Yes, it was.

MR. KELLAHIN: I offer at this time Anadarko Production Company's Exhibit Number 1.

MR. NUTTER: Anadarko's Exhibit Number 1 will be admitted in evidence.

(Whereupon, Anadarko's Exhibit Number 1 was offered and admitted in evidence.)

MR. KELLAHIN: That completes the examination of the witness,

MR. NUTTER: Are there any questions of Mr. Stumphoffer?

CROSS-EXAMINATION

BY MR. NUTTER:

Q You say that the 13 Hugh Well was temporarily abandoned after producing less than 1,000 barrels?

A Yes. It was producing approximately 500 barrels of fluid a day, about three or four per cent oil, which is about twelve or fifteen barrels a day, and which, in our opinion, is not economic.

Q This doesn't pay the electric bill?

A No.

MR. NUTTER: Any further questions of the witness: He may be excused.

(Witness excused.)

MR. NUTTER: Do you have anything further, Mr. Kellahin?

MR. KELLAHIN: That's all.

MR. NUTTER: Does anyone have anything further they wish to offer in Case 4065? Do you have anything further, Mr. Hinkle?

MR. HINKLE: No.

MR. NUTTER: If nothing further, we will take the case under advisement.

I N D E X

<u>WITNESSES</u>	<u>PAGE</u>
A. L. CARPENTER	
Direct Examination by Mr. Hinkle	2
Cross Examination by Mr. Nutter	14
C. W. STUMPHOFFER	
Direct Examination by Mr. Kellahin	16
Cross Examination by Mr. Nutter	21

E X H I B I T S

<u>NUMBER</u>	<u>MARKED FOR IDENTIFICATION</u>	<u>OFFERED AND ADMITTED IN EVIDENCE</u>
Exhibit #1	3	14
Exhibit #2	11	14
Exhibit #3	12	14
Exhibit #4	12	14
Anadarko's #1	15	20

STATE OF NEW MEXICO)
) ss
COUNTY OF BERNALILLO)

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

Witness my Hand and Seal this 6th day of March, 1970,



NOTARY PUBLIC

My Commission Expires:

June 19, 1971



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

March 5, 1969

EXAMINER HEARING

IN THE MATTER OF:)

Application of Humble Oil)
& Refining Company for)
the creation of a new oil)
pool, assignment of dis-)
covery allowable, and the)
promulgation of pool rules,)
Lea County, New Mexico.)

Case No. 4065

BEFORE: Daniel S. Nutter, Examiner

TRANSCRIPT OF HEARING

MR. NUTTER: Case 4065.

MR. HATCH: Case 4065, application of Humble Oil and Refining Company for the creation of a new oil pool, assignment of discovery allowable, and the promulgation of pool rules, Lea County, New Mexico.

MR. HINKLE: Clarence Hinkle, of Hinkle, Bondurant and Christy of Roswell, appearing on behalf of Humble Oil and Refining Company. We have one witness and two exhibits.

(Witness sworn.)

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

A. L. CARPENTER

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

DIRECT EXAMINATION

BY MR. HINKLE:

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

A A. L. Carpenter, Hobbs, New Mexico, Humble Oil and Refining Company.

Q What is your position with them?

A District Chief Engineer.

Q Have you previously testified before the Oil Conservation

Commission?

A Yes, sir.

Q And your qualifications as a petroleum engineer are a matter of record with the Commission?

A Yes, sir.

Q Are you familiar with the application of Humble in Case No. 4065?

A Yes, sir.

Q What is Humble seeking to accomplish by this application?

A In Case No. 4065, that is Humble's application to have its New Mexico State "S" water source well No. 4, State Engineer File No. CP-427, reclassified from a water well to a San Andres oil well. It also includes the exception to Rule 104 for an unorthodox location. It is further requested that the establishment of temporary special pool rules including 80-acre spacing allowables and proration units, and a discovery allowable for this subject water well. The 80-acre proration unit should run east-west with two per quarter section.

Q We can go into that later. Where is the water well located?

A It is located 175 feet from the south line, and 650 feet from the west line of Section 2, Township 22 South, Range 37

East, Lea County, New Mexico.

Q Is this well located within the unit area?

A Yes, it is.

Q What unit?

A The Paddock San Angelo Unit.

Q Is Humble the operator of that unit?

A Yes, sir.

Q Have you prepared an exhibit for introduction in this case?

A Yes, sir.

Q Refer to Humble's Exhibit 1, and explain what this is and what it shows.

A This is a plat showing the unit area of the Paddock San Angelo Unit of which Humble is the operator, and the surrounding area. On this exhibit, the dark colored wide line is the unit perimeter. Over on the central east portion of the map, there is an enclosure which is not included; it is also in a wide line. It shows the location of the subject water well in the southwest quarter of the southwest quarter of Section 2.

Q What is the history of this well?

A Well, this water well, water rights were obtained starting in 1965 to develop a water source for the Paddock Unit. It was drilled with unit money to the lower San Andres to

develop a water source for the evaluation of a double 80-acre five-spot pilot.

Q The Paddock is essentially waterflood and secondary water recovery?

A Yes, it is.

Q Did you find water in this well?

A Yes, sir, we did.

Q What else did you find?

A We found some nasty oil.

Q What was the depth of the well?

A The TD on the well was 4,900 feet.

Q What did your initial test show on the well?

A Well, the initial representative 24-hour test, it produced 6,180 barrels of water and just over 100 barrels of oil.

Q With this condition prevailing, is it satisfactory to use this water with the oil for the waterflood project?

A No, sir.

Q What do you propose to do with it?

A Well, I don't -- do you mean legally, or with reference to what?

Q What would you like to do?

A We want to reclassify the well so we can sell the oil

and get rid of the oil, so that we can use our water source as it was originally intended.

Q Now, why was the well located where it is located in an unorthodox location?

A Under this CP-427, you are tied to a quarter, quarter, quarter, and this is a multipay area in all reservoirs. There are several producing horizons. There are a lot of other wells in the vicinity, and there is a railroad track, as you can see in Exhibit 1, that crowds the well. That was about the only place we could drill it, and that is the reason it is closer to the south line.

Q And at that time that complied with the regulations or request of the State Engineer?

A Yes, sir.

Q Now, in your opinion, will this well produce if the oil can be separated from it, sufficient water for the pilot flood?

A Yes, sir,

Q What have you done, if anything, with respect to trying to cut off the oil?

A We have spent about \$30,000 on two different squeeze cement jobs in an effort to eliminate the oil production. In fact, we have squeeze cemented the top three perforated intervals

in the lower San Andres. Actually, the highest producing present perforation is 325 feet below the top of the San Andres right now.

Q Are these perforations shown by the well log?

A Yes, they are.

Q Will you refer to Exhibit Number 2, and explain that to the Commission?

A All right, sir. Exhibit Number 2 is a neutron porosity log, and in the well bore on that log is shown the top of the San Andres, the perforated intervals, the stimulation treatments, and it also depicts the fact that the top three zones have been squeezed with cement.

Q What was the result of your squeeze operation workover?

A Well, I think the well probably would have made more oil on a long production test had we not squeezed it. I think we retarded it somewhat.

Q In your opinion, can the oil be effectively shut off from the water?

A We don't think it can from a practical standpoint. We spent \$130,000 on this little old water well trying to drill it and complete it, and get rid of the oil so far, and this is unit money, and from a prudent standpoint we have to represent

all the working interests on it. We think that predominately this oil is migrating out into the reservoir rock downward, and not in the vicinity of the well bore.

Q Now, in your application you are proposing the adoption of special field rules?

A Yes, sir.

Q What special field rules do you recommend to the Commission for adopting?

A Well, we are recommending temporary special pool rules, including 80-acre spacing, 80-acre allowables, and 80-acre proration units, and a discovery allowable for this subject well.

Q Now, on the proration, well spacing proration unit, do you want specific 80-acres designated?

A Yes, sir, we would prefer and recommend that the 80-acre proration unit should run east-west, with two per quarter section; that is the north half and the south half of each quarter section would be an 80-acre proration unit.

Q Do you have any recommendation to make with respect to the well locations?

A Yes, sir. We would like to recommend that the operators should be allowed to drill in either 40-acre tract of each 80-acre east-west proration unit, with the wells being located no

closer than 330 feet from any 40-acre tract boundary.

Q Would you also like to have the rules specifically exempt the subject well as far as the location is concerned?

A Yes, sir.

Q Is there any particular reason that you want 80-acre spacing and 80-acre allowable in this particular case?

A Yes, sir. We spent this unit's money developing a non-potable water source, to evaluate this \$11 million flood with its double 80-acre five-spot pilot, and our main goal in the drilling of this well was to evaluate this waterflood unit. What was the rest of the question?

Q The reason why you wanted the discovery allowable.

A And tied to this our predominate desire in this water well is to not be limited on our water production. We need the 6,000 barrels a day. So, based on what little factual data we have been able to develop, by obtaining the discovery allowable and the 80-acre allowable, we feel we could produce the amount of water we need without being limited on the oil allowable, and that is the only reason we are requesting this.

Q Do you feel that one well in this San Andres will effectively and efficiently drain as much as 80 acres?

A We do. We do think it will. There are some very porous zones in this San Andres, and we don't have enough

factual data to prove it at this time, and that is the reason we are requesting temporary special rules.

Q Of a year?

A Of a year, yes, sir.

Q Do you feel by that time the production history and perhaps the drilling of additional wells will demonstrate whether or not one well will effectively and efficiently drain as much as 80 acres?

A Yes, we do.

Q Do you feel that the adoption of special field rules in this case will be in the interest of conservation and the prevention of waste?

A Yes, sir.

Q Would it also prevent the violation of correlative rights or protection of correlative rights?

A Yes, sir.

Q Will it, in your opinion, promote the greatest ultimate recovery of production from the San Andres?

A Yes. I even have a name to recommend.

Q Go ahead and recommend it.

A The nearest pool in this reservoir of any magnitude is the Eunice Pool, approximately four to five miles northwest of here. And since on Exhibit 1, you can see this is practically

in the city limits of Eunice, and this well is south of Eunice, we propose to call it the South Eunice San Andres Pool.

Q In your opinion, is this a new discovery or a new pool?

A Yes, sir.

Q Within the rules of the Commission?

A Yes, sir.

Q There are no other wells producing from this particular formation in the immediate vicinity?

A No, sir.

Q Do you have any further comments?

A No, sir.

MR. HINKLE: That is all I have on direct examination.

CROSS EXAMINATION

BY MR. NUTTER:

Q Mr. Carpenter, does CP-427 set any limit on the amount of water that you can produce?

A No, sir. That was obtained under the old statute before the Legislature in the last session. This well, along with five other water wells, has been allocated 1,980 acre feet per year, and it can be drawn from any well, any of the six, or all of them together. Looking at it from a prudent standpoint, as you can see in Exhibit 2, we went back in after the

squeeze jobs upstairs, and put a lot of acid in those downstairs to develop enough water in this one well to evaluate this pilot.

Q Those others, -- another five or four?

A Another five.

Q Do they all come under the same permit for the use of water in this unit area here?

A Yes, sir.

Q In other words, you are entitled to take out 1,900 acre feet a year?

A Yes, sir.

Q From this one well --

A If it would make it.

Q If it would make it?

A Yes, sir. That is, back to Commission terminology, that is 41,500 barrels of water a day. And this well won't quite do it.

Q I was wondering if you were going to exceed any limitation on water withdrawal in attempting to make the top allowable for 80 acres, plus a discovery allowable?

A No, sir. The reason for the request, what we are trying to do is have no limitation on our water production.

Q Now, the production of oil, Mr. Carpenter, from this well will be kept separate from the production of oil in the

remainder of the wells on the unit, or at least metered prior to commingling --

A Yes, sir.

O -- with the other oil?

A Yes.

MR. NUTTER: I believe that is all. Any further questions?

REDIRECT EXAMINATION

BY MR. HINKLE:

Q What is the quality of water being produced from this well?

A It's highly corrosive, sour, non-potable, and not fit for anything other than waterflooding. It will kill weeds, or stuff like that.

MR. HINKLE: That is all.

MR. NUTTER: If there are no further questions of Mr. Carpenter, he may be excused.

MR. HINKLE: I would like to offer the exhibits.

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

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

MR. NUTTER: Is there anything further?

MR. HINKLE: That is all.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4065? We will take the case under advisement.

I N D E X

<u>WITNESS</u>	<u>PAGE</u>
A. L. CARPENTER	
Direct Examination by Mr. Hinkle	2
Cross Examination by Mr. Nutter	11
Redirect Examination by Mr. Hinkle	13

<u>EXHIBITS</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's Exhibits Numbers 1 and 2	2	13

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 Mortelette
 COURT REPORTER

I do hereby certify that the foregoing is
 a true and correct copy of the original
 the same as the same was filed in
 the office of the Clerk of the Court
 this 3/5 day of March, 1969.

James
 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

March 10, 1970

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

Re: Case No. 4065
Order No. R-3706-A
Applicant:
Humble Oil & Refining 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:

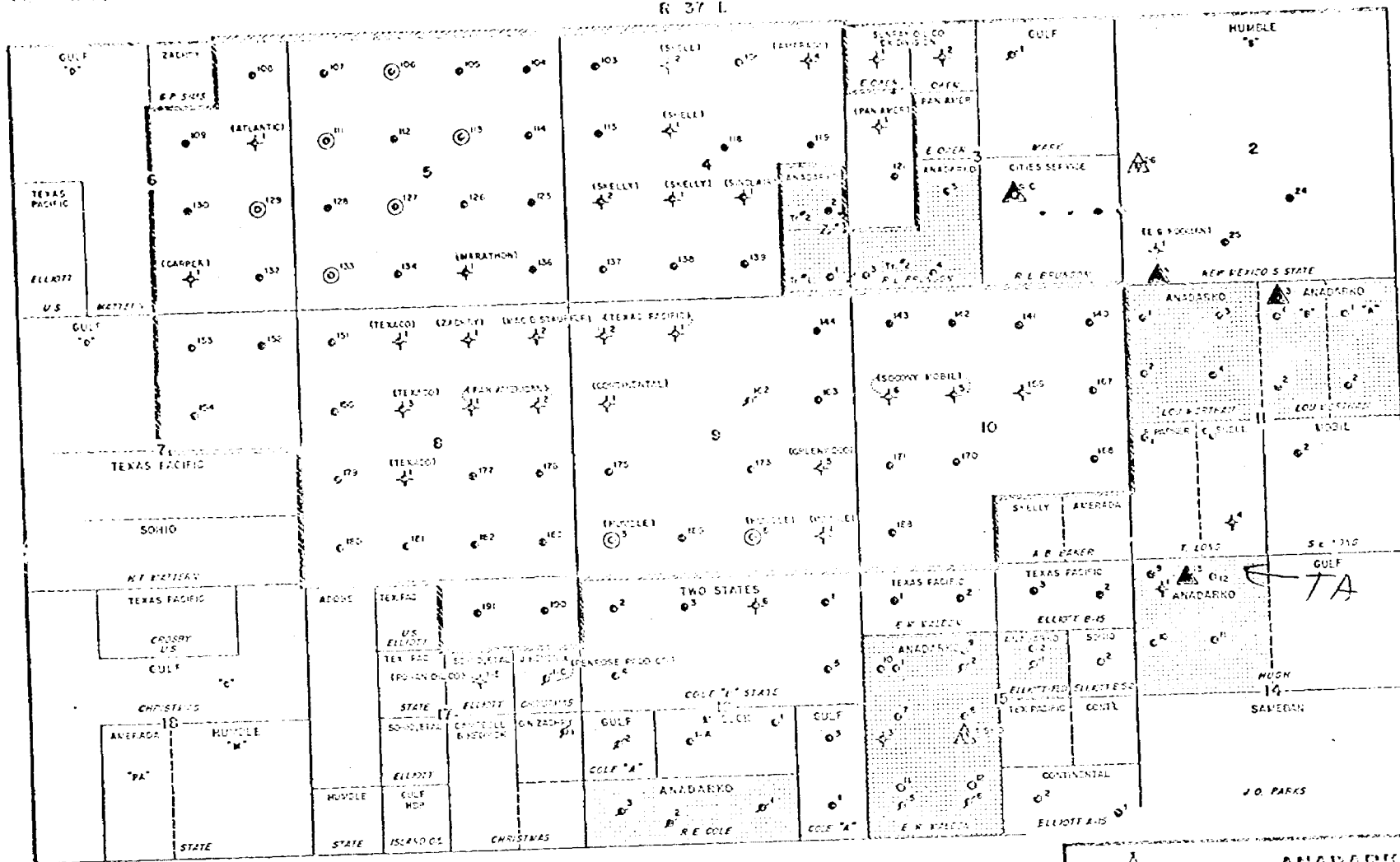
Hobbs OCC x

Artesia OCC

Aztec OCC

Other Mr. Jason Kellahin

R 37 L



LEGEND

- ▲ South Eunice San Andres Oil Well Location
- ▲ South Eunice San Andres Oil Well
- Oil Well
- ✕ Plugged & Abandoned
- ✕ Temporarily Abandoned
- ✕ Dry & Abandoned
- ⊙ Water Injection Well
- ⊙ Water Disposal Well, see notes
- South Pease Shelly Unit (Gulf Operated)
- Anadarko Acreage

BEFORE EXAMINED MUTTER

CIE CONSERVATION

Anadarko EXHIBIT NO. 1

CASE NO. 4065



ANADARKO
PRODUCTION COMPANY

SOUTH EUNICE SAN ANDRES FIELD
LEA COUNTY, NEW MEXICO

0 1500 3000 4500 6000
SCALE FEET

OIL FIELD CHEMICALS

30 FEB 17 AM 8



Dear Sirs —
The enclosed are attachments
that should have been with
our recent report for
Hearings.

Bob Lind (

Humble Oil Co

Quality chemicals for the petroleum industry.



OIL FIELD CHEMICALS

N. M. "S" State
Water Survey well #4
Fertilization local
well.

Quality chemicals for the petroleum industry.

PROJECT OIL & GAS FIELD CUMULATIVE
CUMULATIVE OIL, GAS & WATER PRODUCTION - HUMBLE

POOL: SOUTH ELMIGE-SAN ANDRES		Lease & Well No.		NEW MEXICO "S" STATE WATER SOURCE WELL 4 (CP-427)		
	Bbls.	Bbls.	Mcf	Bbls.	Bbls.	Bbls.
YEAR	OIL PRODUCTION	CUMULATIVE OIL PRODUCTION	HP OR LP GAS PRODUCTION	CUMULATIVE GAS PRODUCTION	WATER	CUMULATIVE BBLs. WATER
1968			HUMBLE EXHIBIT NO. 4			
Jan.			Date 3-4-70			
Feb.			Case 4065			
Mar.						
Apr.						
May						
June						
July						
Aug.	651	651	0		0	
Sept.	0	651	0		0	
Oct.	706	1,357	0		0	
Nov.	691	2,048	0		0	
Dec.	1,042	3,090	0		0	
1969						
Jan.	0	3,090	0		0	
Feb.	0	3,090	0		0	
Mar.	892	3,982	0		44,047	44,047
Apr.	2,083	6,065	949	949	55,773	99,825
May	2,069	8,134	1,606	2,555	55,403	155,228
June	2,067	10,201	1,512	4,067	55,350	210,578
July	2,107	12,308	1,642	5,709	56,421	266,999
Aug.	2,026	14,334	1,185	6,894	54,252	321,251
Sept.	2,066	16,400	1,479	8,373	55,323	376,574
Oct.	2,399	18,799	1,642	10,015	64,240	440,814
Nov.	2,564	21,363	1,837	11,852	68,658	509,472
Dec.	2,599	23,962	1,718	13,570	69,595	579,067
Est. Jan.	2,416	26,378	1,552	15,122	64,695	643,762
Feb.	2,330 (7.5%)	28,708 (3.9%)	1,490	16,612 (GOR 579)	64,120	707,882
Mar.	(S3 BPD)				(2300 BPD)	
Apr.						
May	DRILL & COMPLETE COST:			\$106,000		
June	W/O to Sq. Cmt. Oil Zones:			20,000		
July	Oil Removal Equipment (Installation)					
Aug.	Coalescer			20,800		
Sept.	Up-Flo Filter & Metering Equipment			7,600		
Oct.				\$154,400		
Nov.						
Dec.	OPERATING EXPENSE (REPAIRS PER YEAR)					
Jan.	130 H.P., 960 Volt, 70 Amp., Reda (18 Hrs. Per Day)					
Feb.	Power:			\$ 8,900		
Mar.	Repairs:			7,800		
Apr.	Upflow Filter Servicing & Repairs			8,400		
May				\$ 25,100	(\$2100/Mo. ; \$70/Day)	
June	A San Andres oil well w/conventional art. lift					
July	(oprting. exp.)			\$ 1,700	(\$140/Mo. ; \$5/Day)	
Aug.						
Sept.	NEW MEXICO "S" STATE 26					
Oct.	\$43,300 Non-Commercial San Andres Oil Well					
Nov.	Pumped from 4 different zones with rod-pump @ approximately 300 BFPD (3% Oil)					
Dec.	Converted to S.W.D.					

HUMBLE OIL & REFINING COMPANY

MIDLAND, TEXAS 79701

PRODUCTION DEPARTMENT
SOUTHWESTERN DIVISION
L. H. BYRD
MANAGER

February 4, 1969

POST OFFICE BOX 1600

Reclassification of New Mexico
"S" State Water Source Well 4
(State Engineer's File: CP-427)
Lea County, New Mexico

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

Attention: Mr. A. L. Porter, Jr., Executive
Secretary, Director and State Geologist

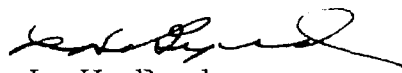
Gentlemen:

Humble Oil & Refining Company respectfully requests a hearing before the Commission to consider its application to reclassify New Mexico "S" State Water Source Well 4 (CP-427) from a water well to an oil well. The well is located 650' from the west line, 175' from the south line, Section 2, T-22-S, R-37-E, Lea County, New Mexico; therefore, an unorthodox location is requested.

This well was completed in the lower San Andres formation as a source of water for the Paddock Unit pilot waterflood project. It is capable of producing the required 6,000 barrels of water per day, but it also produces approximately 100 barrels of oil per day (slightly less than two percent) at this maximum rate of production. For this reason, 80-acre spacing and a discovery allowable are also requested.

It is proposed to produce the well through three phase separation facilities, utilizing all water for the Paddock Unit pilot waterflood project. A request for permission to commingle the captioned well's San Andres oil production with the Paddock Unit production, by metering, has been submitted for administrative approval. Royalty from all oil produced from New Mexico "S" State Water Source Well 4 will be credited to the beneficiary of Humble's New Mexico "S" State lease.

Yours very truly,


L. H. Byrd

DOCKET MAILED

Date 2-20-69

DOCKET MAILED

Date 2-13-69

*for filing
3/5/69*

*4065
Clear 4065*

11-4-68
HUMBLE OIL & REFINING COMPANY

P. O. Box 2100.
Hobbs, New Mexico 88240
October 30, 1968

Mr. A. L. Porter, Jr., Secretary-Director
New Mexico Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Dear Sir:

Humble Oil & Refining Company respectfully requests administrative approval to sell crude oil recovered at its Paddock Unit skimming facilities. The oil is produced from Humble's New Mexico "S" State Water Source Well No. 4, (New Mexico State Engineer File - CP 427) which is completed in the San Andres formation and supplies approximately 6,000 barrels of water per day for the Paddock Unit pilot waterflood.

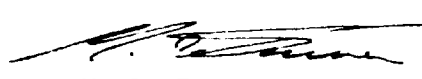
Test data over the past month indicate oil production has leveled off at approximately 1.7 percent of total fluid, or will be about 102 barrels per day.

The New Mexico "S" State Water Source Well No. 4 was drilled under New Mexico State Engineer Permit No. CP 427, a copy of which is attached. Also attached is a section of the neutron porosity log, showing the San Andres formation and the intervals perforated and tested. During initial completion, this well produced approximately 2 percent oil. The three top perforated intervals were successfully squeeze cemented in an effort to eliminate the oil; however, results were unfavorable.

Storage and pipe line connection (Texas-New Mexico) will be provided near the skimming facilities for handling. Your prompt attention to this problem will be appreciated.

Very truly yours,

HUMBLE OIL & REFINING COMPANY


M. C. Turner
District Superintendent

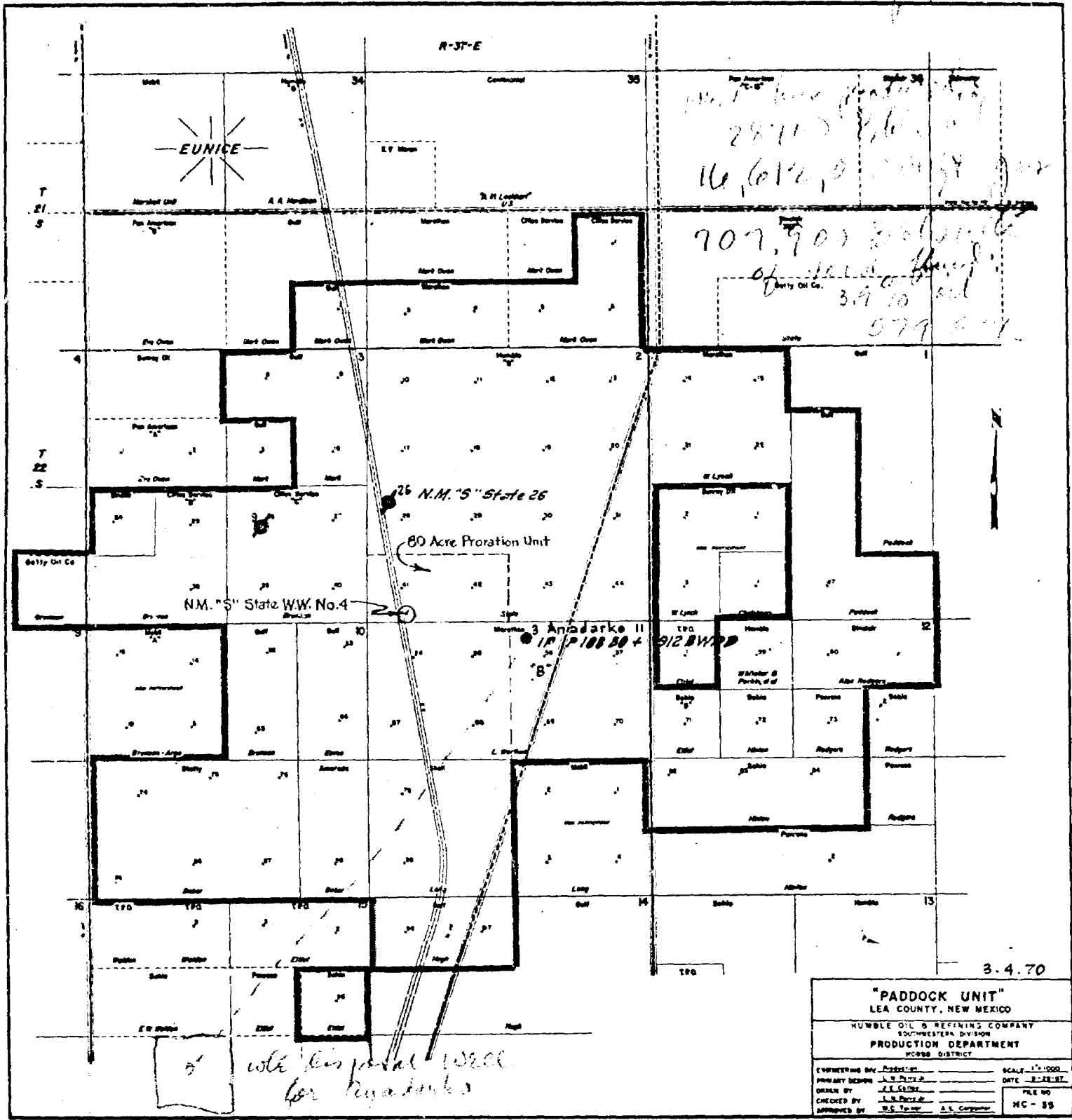
BKB/mcb

cc: Mr. J. R. Tolles
P. O. Box 1600
Midland, Texas 79701

cc: Mr. J. D. Ramey
P. O. Box 1980
Hobbs, New Mexico 88240

cc: Mr. E. C. Barfield
P. O. Box 1600
Midland, Texas 79701

CP 4-7 51 Aug 1970
1000 1000 1000



HUMBLE EXHIBIT NO. 1

Date 3/4/70
Case 4065

IMPORTANT—READ INSTRUCTIONS ON BACK BEFORE FILLING OUT THIS FORM

APPLICATION FOR PERMIT

To appropriate the Underground Waters of the State of New Mexico

CAPITAN UNDERGROUND WATER BASIN

- Application No. CP-427 Book _____ Date Received March 10, 1967
1. Name of applicant Humble Oil and Refining Company
 Postoffice address Box 2100 City or Town Hobbs
 County of Lea State of New Mexico 88240
2. Source of water supply San Andres Formation
(state whether artesian or shallow ground water basin)
 located in Capitan Underground Water Basin
(name of underground stream, valley, artesian basin, etc.)
3. The well is to be located in the SW $\frac{1}{4}$, SW $\frac{1}{4}$, SW $\frac{1}{4}$,
 of section 2, Township 22-S, Range 37-E, N.M.P.M.
 on land owned by State of New Mexico
4. Description of well: driller Unknown, W.D. No. _____; depth to be drilled 5000 feet;
 diameter (outside) of casing 7 inches; type of pump and power plant to be used
Reda submersible pump and electric motor.
5. Quantity of water to be appropriated and beneficially used See attached sheet
(feet depth or acre feet per acre)
 for Secondary Recovery Waterflood Injection purposes.
6. Acreage to be irrigated None acres
 located and described as follows (describe only lands to be irrigated):

Subdivision	Sec.	Twp.	Range	Acres Irrigated	Owner
1937					
1937					
1937					
1937					
1937					
1937					
1937					
1937					
1937					
1937					

(Note: location of well and acreage to be irrigated must be shown on plat on reverse side.)

7. Time required to commence construction Approximately 1 year for pilot phase and 3-1/2 years for expansion.
 Time required to complete the works Approximately 1-1/2 years for pilot phase and 4 years for expansion.
 Time required to fully apply water to beneficial use Initial use in 1-1/2 years and maximum (peak) use in 4 years.
8. Additional statements or explanations (including data on any other water rights appurtenant to above lands)
See Attached Sheet

I, M. C. Turner, District Superintendent, being first duly sworn upon my oath, depose and say that I have carefully read the foregoing statement and each and all of the items contained therein, and that the same are true to the best of my knowledge and belief.

Humble Oil & Refining Company, applicant

Subscribed and sworn to before me this 22nd day of February, A.D., 1967

My Commission expires January 8, 1969

W. A. Kelley Notary Public

*This well (New Mexico "S" State Water Source Well No. 4) will be one of the six wells necessary to produce the anticipated peak amount of 1950 acre feet per year needed during reservoir fill-up after pilot waterflood expansion to full scale unit waterflood.

APPROVAL OF THE STATE ENGINEER

Number of this permit CP-427 Date received corrected _____
 Recorded in Book CP-3 Publication of notice ordered March 16, 1967
 Page 427 Name of paper Hobbs Daily News-Sun
 Application received MARCH 10, 1967 Affidavit of publication filed MAY 16, 1967
 Date returned for correction _____ Date of approval JUNE 8, 1967

This application is approved for combined total of 1950 acre feet from 6 wells of water
 subject to all prior valid and existing rights to the use of the waters of said underground source and provided that
 the applicant complies with all rules and regulations of the State Engineer pertaining to the drilling of wells _____

- (1) ~~Total combined appropriations from wells CP-427 through CP-427-X-5 shall not exceed~~
~~1950 acre feet per annum. (2) A totalizing meter or meters approved by State Engineer shall be~~
~~installed in such a manner as to measure the total combined withdrawal from wells CP-427 thru~~
~~CP-427-X-5. (3) Meter readings for the preceding 3 calendar months shall be submitted to the~~
~~Roswell Office on or before the 10th of January, April, July and October of each year.~~
 (4) ~~The total combined appropriation shall be from the San Andres formation.~~

Works shall be completed and proofs filed on or before May 31, 1971

Water shall be applied to beneficial use and proofs filed on or before May 31, 1971

This is to certify that I have examined the above application for permit to appropriate the underground waters
 of the State of New Mexico and hereby approve the same subject to the foregoing provisions and conditions.

Witness my hand and seal this 8th day of June, A.D. 1967.

By: D. E. Gray S. E. Reynolds State Engineer

LOCATE WELL AS ACCURATELY AS POSSIBLE ON FOLLOWING PLAT:

Section (a) 2, Township 22-S, Range 37-E, N.M.P.M.

			HUMBLE		
4*			STATE		

INSTRUCTIONS

This form shall be executed, preferably typewritten, in triplicate and shall be accompanied by a filing fee of \$5.00.
 Each of triplicate copies must be properly signed and attested.

A separate application for permit must be filed for each well used.

Secs. 1-4—Fill out all blanks fully and accurately.

Sec. 5—Irrigation use shall be stated in feet depth or acre feet of water per acre to be applied on the land. If for
 domestic, municipal, or other purposes, state total quantity in acre feet to be used annually. Domestic use may include
 the irrigation of not more than one acre of lawn and garden for noncommercial use.

Sec. 6—Describe only the lands to be irrigated. If on unsurveyed lands describe by legal subdivision "as pro-
 jected" from the nearest government survey corners, or describe by metes and bounds and tie survey to some perma-
 nent, easily located natural object.

Sec. 7—Estimate time reasonably required to commence and to complete project.

Sec. 8—If lands are irrigated from any other source, explain in this section. Give any other data necessary to
 fully describe water right sought.

If additional space is necessary, use a separate sheet or sheets and attach securely hereto.

NOTE: See attached Paddock Unit Plat showing relative locations of the other 5 wells.

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:

RECORDS CENTER

CASE No. 4065

Order No. R-3706-A

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR THE CREATION OF A NEW OIL
POOL, ASSIGNMENT OF DISCOVERY ALLOW-
ABLE, AND THE PROMULGATION OF POOL
RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 4, 196770,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of March, 196770, 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-3706, dated March 12, 1969, tempo-
rary Special Rules and Regulations were promulgated for the
South Eunice-San Andres Pool, Lea County, New Mexico, establish-
ing 80-acre spacing units for a period of one year.

(3) That pursuant to the provisions of Order No. R-3706,
this case was reopened to allow the operators in the subject pool
to appear and show cause why the South Eunice-San Andres Pool
should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the
South Eunice-San Andres Pool can efficiently and economically
drain and develop 80 acres.

-2-

CASE No. 4065

Order No. R-3706-A

(5) That the Special Rules and Regulations promulgated by Order No. R-3706 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-3706 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the South Eunice-San Andres Pool, Lea County, New Mexico, promulgated by Order No. R-3706, are hereby continued in full force and effect until further order of the Commission.

(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.

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:

RECORDS CENTER & LAW LIBRARY

CASE No. 4065

Order No. R-3706
NOMENCLATURE

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR THE CREATION OF A NEW OIL
POOL, ASSIGNMENT OF DISCOVERY ALLOW-
ABLE, AND THE PROMULGATION OF POOL
RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 5, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this _____ day of March, 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 State "S" Water Source
Well No. 4 (CP-427), located 175 feet from the South line and
650 feet from the West line of Section 2, Township 22 South,
Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks the reclassification of the
aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427)
as an oil well for the production of oil from the San Andres
formation.

(4) That the applicant further seeks the creation of a new
oil pool for San Andres production in Lea County, New Mexico,

for its aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427), and the assignment of an oil discovery allowable in the amount of 21,190 barrels to said well.

(5) That the applicant further seeks the promulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.

(7) ~~(6)~~ That the aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427) should be reclassified as an oil well for the production of oil from the San Andres formation.

(6) ~~(7)~~ That the evidence presently available indicates that the aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427) has discovered a separate common source of supply which should be designated the South Eocene - San Andres Pool; that the vertical limits of said pool should be the San Andres formation ~~as found in the interval from _____ feet to _____ feet on the log of the aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427);~~ and that the horizontal limits of said pool should be the

3/2 SW 1/4 of said Section 2 and the N 1/2 NW 1/4 of Section 11, Township 22 South, Range 37 East, 40NPM.

(8) That the discovery well for the aforesaid pool, Humble Oil & Refining Company's New Mexico State "S" Water Source Well No. 4 (CP-427), is entitled to and should receive a bonus discovery oil allowable in the amount of 21,190 barrels, based upon the top perforations in said well at 4238 feet, to be assigned over a two-year period.

(9) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Eocene - San Andres Pool.

(10) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(11) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

(12) That this case should be reopened at an examiner hearing in March, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the South Eunice - San Andres Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That the Humble Oil & Refining Company New Mexico State "S" Water Source Well No. 4 (CP-427), located 175 feet from the South line and 650 feet from the West line of Section 2, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby reclassified as an oil well for the production of oil from the San Andres formation.

(2) That a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production, is hereby created and designated the South Eunice - San Andres Pool, with vertical limits comprising the San Andres formation ~~as found in the interval from _____ feet to _____ feet on the log of the discovery well, Humble Oil & Refining Company's New Mexico State "S" Water Source Well No. 4 (CP-427), located 175 feet from the South line and 650 feet from the West line of Section 2, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico,~~ and horizontal limits comprising the following-described area:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 2: 6/2 SW/4

Section 11: N/2 NW/4

aforsaid
the Humble Oil & Refining Company New Mexico
State "S" water source Well No. 4 (C.P. 427),
~~located~~

(3) That the ~~aforsaid~~ discovery well, is hereby authorized an oil discovery allowable of 21,190 barrels to be assigned to said well at the rate of 30 barrels per day in accordance with Rule 509 of the Commission Rules and Regulations.

(4) That temporary Special Rules and Regulations for the South Eunice - San Andres Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS

FOR THE

South Eunice - San Andres POOL

RULE 1. Each well completed or recompleted in the South Eunice - San Andres Pool or in the San Andres formation within one mile thereof, and not nearer to or within the limits of another designated San Andres oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2 ^{or} S/2, ~~E/2, or W/2~~ of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and

the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. *Each well shall be located no closer than 330 feet to a quarter-quarter section line.*

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 2.00 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Eocene - San Andres Pool or in the San Andres formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before April 1, 1969, 1969.

(2) That each well presently drilling to or completed in the South Eocene - San Andres Pool or in the San Andres formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in March, 1970, at which time the operators in the subject pool may appear and show cause why the South Eocene - San Andres Pool should not be developed on 40-acre spacing units.

(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.

dearnley-meier

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

1120 SIMMS BLDG. • P. O. BOX 1092 • PHONE 243-6891 • ALBUQUERQUE, NEW MEXICO



BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
February 26, 1969

EXAMINER HEARING

IN THE MATTER OF:

Application of Humble Oil &
Refining Company for an
unorthodox oil well location
and reclassification of a water
well to an oil well, Lea County,
New Mexico.

Case No. 4065

BEFORE: Elvis A. Utz, Examiner.

TRANSCRIPT OF HEARING

MR. UTZ: The hearing will come to order, please. First, I'll call the continued cases, of which there are three.

Case No. 4065.

MR. HATCH: Case 4065. Application of Humble Oil & Refining Company for an unorthodox oil well location and reclassification of a water well to an oil well, Lea County, New Mexico.

Examiner please, it has been necessary to readvertise this case to make corrections and applicant has asked that it be continued to March the 5th, 1969.

MR. UTZ: Case 4065 will be continued to March 5th, 1969.

STATE OF NEW MEXICO)
) ss
 COUNTY OF BERNALILLO)

I, GLENDA BURKS, 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.

Witness my hand this 29th day of March, 1969.

Glenda Burks
 Court Reporter

I do hereby certify that the foregoing is
 a complete record of the proceedings in
 the hearing of Case No. 4065
 heard by me on Feb - 26 - 1969.
Thos. A. [Signature] Examiner
 New Mexico Oil Conservation Commission

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. 4065
Order No. R-3706-A

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR THE CREATION OF A NEW OIL
POOL, ASSIGNMENT OF DISCOVERY ALLOW-
ABLE, AND THE PROMULGATION OF POOL
RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 4, 1970,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 11th day of March, 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 by Order No. R-3706, dated March 12, 1969, tempo-
rary Special Rules and Regulations were promulgated for the
South Eunice-San Andres Pool, Lea County, New Mexico, establish-
ing 80-acre spacing units for a period of one year.

(3) That pursuant to the provisions of Order No. R-3706,
this case was reopened to allow the operators in the subject
pool to appear and show cause why the South Eunice-San Andres Pool
should not be developed on 40-acre spacing units.

(4) That the evidence establishes that one well in the
South Eunice-San Andres Pool can efficiently and economically
drain and develop 80 acres.

-2-

CASE No. 4065

Order No. R-3706-A

(5) That the Special Rules and Regulations promulgated by Order No. R-3706 have afforded and will afford to the owner of each property in the pool the opportunity to produce his just and equitable share of the oil in the pool.

(6) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, the Special Rules and Regulations promulgated by Order No. R-3706 should be continued in full force and effect until further order of the Commission.

IT IS THEREFORE ORDERED:

(1) That the Special Rules and Regulations governing the South Eunice-San Andres Pool, Lea County, New Mexico, promulgated by Order No. R-3706, are hereby continued in full force and effect until further order of the Commission.

(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


esr/

Docket No. 7-70

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 4, 1970

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 4318: Application of Pan American Petroleum Corporation for a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard gas proration units into one 320-acre non-standard unit comprising the N/2 of Section 7, Township 24 South, Range 37 East, Jalmat Gas Pool, Lea County, New Mexico, to be dedicated to its Meyers "B" Federal R/A Wells Nos. 1 and 10, located in Units D and G, respectively, of said Section 7. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4065: (Reopened):

In the matter of Case No. 4065 being reopened pursuant to the provisions of Order No. R-3706, which order established 80-acre spacing units for the South Eunice-San Andres 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 units.

CASE 4314: (Continued and readvertised from February 25, 1970, Examiner Hearing).
Application of Coastal States Gas Producing Company for pool redelineation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the redelineation of certain pool boundaries to include the deletion of the W/2 and SE/4 of Section 21, Township 13 South, Range 13 East, Lea County, New Mexico, from the Lazy S-Pennsylvanian Pool and the extension of the North Baum Upper Pennsylvanian Pool to include said deleted acreage.

CASE 4069:
(Reopened) In the matter of Case No. 4069 being reopened pursuant to the provisions of Order No. R-3701, which order established 80-acre spacing units for the Lovington-Devonian Pool, Lea County, New Mexico, for a one-year period. All interested parties may appear and show cause why said pool should not be developed on 40-acre units.

- CASE 4317: (Continued from the February 15, 1970, Examiner Hearing)
Application of Union Oil Company of California for the creation of a new gas pool and special pool rules, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new San Andres gas pool for its Federal "18" Well No. 2 located 660 feet from the South and East lines of Section 18 Township 8 South, Range 38 East Roosevelt County, New Mexico, and for the promulgation of special rules therefor, including provisions for 160-acre spacing units and a casing program.
- CASE 4319: Application of Texaco Inc. for downhole commingling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to commingle production from the North Vacuum-Abo Pool and the Vacuum-Wolfcamp Pool in the wellbores of its New Mexico "Q" State Well No. 4 and its New Mexico "N" State Well No. 6, triple completions located respectively in Unit P of Section 25, Township 17 South, Range 34 East and Unit L of Section 30, Township 17 South, Range 35 East, Lea County, New Mexico.
- CASE 4315- (Continued from February 25, 1970, Examiner Hearing)
Application of Pan American Petroleum Corporation for pool consolidation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of the Fowler-Lower Paddock and Fowler-Blinsbry Pools, Lea County, New Mexico, into one pool. Applicant further requests that the consolidated pool be governed by rules presently applicable to the Fowler-Blinsbry Pool.
- CASE 4316: (Continued from February 25, 1970, Examiner Hearing)
Application of Pan American Petroleum Corporation for an un-orthodox gas well location Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 104 C 11 to permit the drilling of a well at an un-orthodox gas well location 330 feet from the North and East lines of Section 11, Township 23 South, Range 26 East, South Carlsbad-Strawn.-Atoka, and-Morrow Gas Pools, Eddy County, New Mexico. The N/2 of said Section 11 to be dedicated to the well.



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

March 12, 1969

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

Re: Case No. 4065
Order No. R-3706

Applicant:
Humble Oil & Refining Company

DOCKET MOILED

Dear Sir:

Date 2-19-70

Enclosed herewith are two copies of the above-referenced Commission order recently entered in the subject case.

Very truly yours,

G. L. Porter, Jr.

A. L. PORTER, Jr.
Secretary-Director

ALP/ir

Copy of order also sent to:

Hobbs OCC x

Artesia OCC_____

Aztec OCC

Other _____

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. 4065
Order No. R-3706
NOMENCLATURE

APPLICATION OF HUMBLE OIL & REFINING
COMPANY FOR THE CREATION OF A NEW OIL
POOL, ASSIGNMENT OF DISCOVERY ALLOW-
ABLE, AND THE PROMULGATION OF POOL
RULES, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on March 5, 1969,
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 12th day of March, 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 State "S" Water Source
Well No. 4 (CP-427), located 175 feet from the South line and
650 feet from the West line of Section 2, Township 22 South,
Range 37 East, NMPM, Lea County, New Mexico.

(3) That the applicant seeks the reclassification of the
aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427)
as an oil well for the production of oil from the San Andres
formation.

(4) That the applicant further seeks the creation of a new
oil pool for San Andres production in Lea County, New Mexico,

-2-

CASE No. 4065
Order No. R-3706

for its aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427), and the assignment of an oil discovery allowable in the amount of 21,190 barrels to said well.

(5) That the applicant further seeks the promulgation of special rules and regulations governing said pool, including a provision for 80-acre spacing units.

(6) That the evidence presently available indicates that the aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427) has discovered a separate common source of supply which should be designated the South Eunice-San Andres Pool; that the vertical limits of said pool should be the San Andres formation and that the horizontal limits of said pool should be the S/2 SW/4 of said Section 2 and the N/2 NW/4 of Section 11, Township 22 South, Range 37 East, NMPM.

(7) That the aforesaid New Mexico State "S" Water Source Well No. 4 (CP-427) should be reclassified as an oil well for the production of oil from the San Andres formation.

(8) That the discovery well for the aforesaid pool, Humble Oil & Refining Company's New Mexico State "S" Water Source Well No. 4 (CP-427), is entitled to and should receive a bonus discovery oil allowable in the amount of 21,190 barrels, based upon the top perforations in said well at 4238 feet, to be assigned over a two-year period.

(9) That in order to prevent the economic loss caused by the drilling of unnecessary wells, to avoid the augmentation of risk arising from the drilling of an excessive number of wells, to prevent reduced recovery which might result from the drilling of too few wells, and to otherwise prevent waste and protect correlative rights, temporary special rules and regulations providing for 80-acre spacing units should be promulgated for the South Eunice-San Andres Pool.

(10) That the temporary special rules and regulations should provide for limited well locations in order to assure orderly development of the pool and protect correlative rights.

(11) That the temporary special rules and regulations should be established for a one-year period in order to allow the operators in the subject pool to gather reservoir information to establish the area that can be efficiently and economically drained and developed by one well.

CASE No. 4065
Order No. R-3706

(12) That this case should be reopened at an examiner hearing in March, 1970, at which time the operators in the subject pool should be prepared to appear and show cause why the South Eunice-San Andres Pool should not be developed on 40-acre spacing units.

IT IS THEREFORE ORDERED:

(1) That the Humble Oil & Refining Company New Mexico State "S" Water Source Well No. 4 (CP-427), located 175 feet from the South line and 650 feet from the West line of Section 2, Township 22 South, Range 37 East, NMPM, Lea County, New Mexico, is hereby reclassified as an oil well for the production of oil from the San Andres formation.

(2) That a new pool in Lea County, New Mexico, classified as an oil pool for San Andres production, is hereby created and designated the South Eunice-San Andres Pool, with vertical limits comprising the San Andres formation and horizontal limits comprising the following-described area:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM

Section 2: S/2 SW/4

Section 11: N/2 NW/4

(3) That the discovery well, the aforesaid Humble Oil & Refining Company New Mexico State "S" Water Source Well No. 4 (CP-427), is hereby authorized an oil discovery allowable of 21,190 barrels to be assigned to said well at the rate of 30 barrels per day in accordance with Rule 509 of the Commission Rules and Regulations.

(4) That temporary Special Rules and Regulations for the South Eunice-San Andres Pool, Lea County, New Mexico, are hereby promulgated as follows:

SPECIAL RULES AND REGULATIONS

FOR THE

SOUTH EUNICE-SAN ANDRES POOL

RULE 1. Each well completed or recompleted in the South Eunice-San Andres Pool or in the San Andres formation within one mile thereof, and not nearer to or within the limits of another designated San Andres oil pool, shall be spaced, drilled, operated, and produced in accordance with the Special Rules and Regulations hereinafter set forth.

RULE 2. Each well shall be located on a standard unit containing 80 acres, more or less, consisting of the N/2 or S/2 of a governmental quarter section; provided, however, that nothing contained herein shall be construed as prohibiting the drilling of a well on each of the quarter-quarter sections in the unit.

RULE 3. The Secretary-Director of the Commission may grant an exception to the requirements of Rule 2 without notice and hearing when an application has been filed for a non-standard unit comprising a governmental quarter-quarter section or lot, or the unorthodox size or shape of the tract is due to a variation in the legal subdivision of the United States Public Land Surveys. All operators offsetting the proposed non-standard unit shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all offset operators or if no offset operator has entered an objection to the formation of the non-standard unit within 30 days after the Secretary-Director has received the application.

RULE 4. Each well shall be located no closer than 330 feet to a quarter-quarter section line.

RULE 5. The Secretary-Director may grant an exception to the requirements of Rule 4 without notice and hearing when an application has been filed for an unorthodox location necessitated by topographical conditions or the recompletion of a well previously drilled to another horizon. All operators offsetting the proposed location shall be notified of the application by registered or certified mail, and the application shall state that such notice has been furnished. The Secretary-Director may approve the application upon receipt of written waivers from all operators offsetting the proposed location or if no objection to the unorthodox location has been entered within 20 days after the Secretary-Director has received the application.

RULE 6. A standard proration unit (79 through 81 acres) shall be assigned an 80-acre proportional factor of 2.00 for allowable purposes, and in the event there is more than one well on an 80-acre proration unit, the operator may produce the allowable assigned to the unit from the wells on the unit in any proportion.

The allowable assigned to a non-standard proration unit shall bear the same ratio to a standard allowable as the acreage in such non-standard unit bears to 80 acres.

-5-

CASE No. 4065

Order No. R-3706

IT IS FURTHER ORDERED:

(1) That the locations of all wells presently drilling to or completed in the South Eunice-San Andres Pool or in the San Andres formation within one mile thereof are hereby approved; that the operator of any well having an unorthodox location shall notify the Hobbs District Office of the Commission in writing of the name and location of the well on or before April 1, 1969.

(2) That each well presently drilling to or completed in the South Eunice-San Andres Pool or in the San Andres formation within one mile thereof shall receive a 40-acre allowable until a Form C-102 dedicating 80 acres to the well has been filed with the Commission.

(3) That this case shall be reopened at an examiner hearing in March, 1970, at which time the operators in the subject pool may appear and show cause why the South Eunice-San Andres Pool should not be developed on 40-acre spacing units.

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

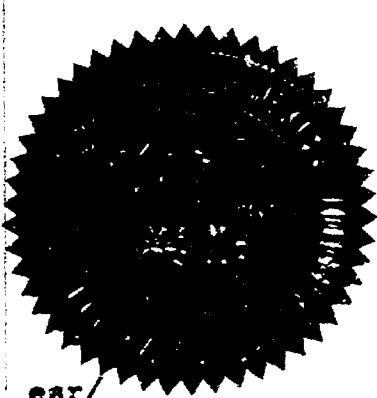
DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION


DAVID F. CARGO, Chairman


ALEX J. ARMIJO, Member


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



esr/

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 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 Daniel S. Nutter, Examiner, or
Elvis A. Utz, Alternate Examiner.

CASE 4071: Application of T. G. Sivley for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete his Federal Silver Well No. 4 located in the SW/4 SE/4 of Section 28, Township 20 South, Range 34 East, Lynch Yates-Seven Rivers Pool, in such a manner as to permit production of oil from the Yates-Seven Rivers formations and the disposal of produced salt water into the Lower Seven Rivers formation.

CASE 4072: Application of Pennzoil United, Inc., for a dual completion, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its Mobil "12" Federal Well No. 1 located in Unit B of Section 12, Township 23 South, Range 26 East, Eddy County, New Mexico, in such a manner as to permit the production of gas from an undesignated Atoka gas pool and gas from an undesignated Morrow gas pool through parallel strings of tubing.

CASE 4073: Application of Standard Oil Company of Texas for a dual completion and salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Continental State Well No. 1 located in Unit B of Section 5, Township 24 South, Range 38 East, Stateline-Ellenburger Pool, Lea County, New Mexico, in such a manner as to permit production of oil from the Ellenburger formation through tubing and the disposal of produced salt water into the Queen, San Andres, Glorieta, Tubk, Drinkard, and Mississippian formation through the casing-casing annulus in the open-hole interval from 4105 feet to 8980 feet.

CASE 4067: (Continued from the February 26, 1969 Examiner Hearing)

Application of Benson-Montin-Greer Drilling Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the La Plata-Gallup Pool, San Juan County, New Mexico, including a provision for 160-acre spacing and proration units. Applicant further requests that said special rules provide that the unit allowable for a 160-acre unit in said pool be allocated on the basis of four times the normal unit allowable for Northwest New Mexico, and that no credit be given for depth factors. Applicant further requests that said special rules be limited in their application to the exterior boundaries of the La Plata-Mancos Unit Area.

CASE 4074: Application of Benson-Montin-Greer Drilling Corporation for a pressure maintenance project, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pressure maintenance project by the injection of water into the Gallup formation in its La Plata Mancos Unit Well No. 1 located in Unit P of Section 31, Township 32 North, Range 13 West, and by the injection of gas into said Gallup formation in its La Plata Mancos Unit Well No. 4 located in Unit N of said Section 31, La Plata-Gallup Pool, San Juan County, New Mexico. Applicant, further seeks the promulgation of special rules governing the operation of said project.

CASE 4075: Application of Benson-Montin-Greer Drilling Corporation for amendment of the La Plata Mancos Unit Agreement, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks to amend the form of the La Plata Mancos Unit Agreement, San Juan County, New Mexico, with respect to Sections 11 and 12 of said unit agreement, to permit inclusion in the participating area of any and all lands necessary for unit operations.

CASE 4076: Application of American Trading and Production Corporation for the creation of a new pool, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for its Southeast Lea Unit Well No. 2 located in Unit L of Section 25, Township 20 South, Range 35 East, Lea County, New Mexico.

CASE 4065: Application of Humble Oil & Refining Company for the creation of a new oil pool, assignment of discovery allowable, and the promulgation of pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have its New Mexico State "S" Water Source Well No. 4 (SF-427), located at an unorthodox oil well location 650 feet from the West line and 175 feet from the South line of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico, reclassified as an oil well for the production of oil from the San Andres formation. Applicant further seeks the creation of a new San Andres oil pool for said well and the assignment of an oil discovery allowable of approximately 21,190 barrels to said well. Applicant further seeks the promulgation of special rules for said pool, including a provision for 80-acre proration units.

CASE 4066: (Continued from the February 26, 1969 Examiner Hearing)

Application of Humble Oil & Refining Company for the consolidation of two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard 320-acre gas proration units into one standard 640-acre unit comprising all of Section 26, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its New Mexico State "G" Wells Nos. 2 and 4 located in Units P and G, respectively, of said Section 26. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in proportion.

OIL CONSERVATION COMMISSION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

January 9, 1969

C
O
P
Y
Mr. M. C. Turner
District Superintendent
Humble Oil & Refining Company
Post Office Box 2100
Hobbs, New Mexico 83240

DOCKET MAILED

Date 2-20-69

Dear Mr. Turner:

Mr. Paul Eaton of Roswell called me this afternoon inquiring as to why the Commission had not acted on your application for administrative approval to sell crude oil recovered at its Paddock Unit skimming facilities. Immediately after talking to Mr. Eaton I found your letter in my files with a note dated November 4, 1968, indicating that I had asked Joe Ramey, our district supervisor, to advise your office that based on the information which you had submitted, the well should be completed and operated as an oil well. This of course would mean that it would be subject to the allowable limitations for that depth.

After talking to Mr. Eaton this afternoon, I called Mr. Ramey who advised me that he had talked to Mr. Carpenter of your office and had been advised by him that you still wanted a written reply from this office. Mr. Ramey however forgot to advise me that you wanted the reply.

Mr. Ramey advised me this afternoon that he had authorized the sale of the oil that has been produced up to this time. I would suggest however that you proceed to have the well classified as an oil well and assigned an allowable as soon as possible. I believe that Mr. Ramey discussed with Mr. Carpenter the possibility of 80-acre spacing

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO 87501

-2-

Mr. M. C. Turner
Humble Oil & Refining Company
Hobbs, New Mexico

January 9, 1969

to take care of the allowable problem. No definite commitment could be made however on the spacing until after notice and hearing.

I regret the delay in answering your letter.

Very truly yours,

A. L. PORTER, Jr.
Secretary-Director

C
O
P
Y
ALP/ir

cc: Mr. Paul Eaton
Hinkle, Bondurant & Christy
Attorneys at Law
Roswell, New Mexico

Mr. J. R. Tolles
Post Office Box 1600
Midland, Texas

Mr. E. C. Barfield
Post Office Box 1600
Midland, Texas

Mr. Joe D. Ramey
Oil Conservation Commission
Hobbs, New Mexico

DOCKET: EXAMINER HEARING - WEDNESDAY - FEBRUARY 26, 1969

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

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

- CASE 4052: Application of Mobil Oil Corporation for a pool creation and discovery allowable, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks the creation of the Lightcap-Pennsylvanian Pool in Chaves County, New Mexico, comprising the NE/4 NE/4 of Section 7, Township 8 South, Range 30 East, and for the assignment of approximately 35,650 barrels of oil discovery allowable to the discovery well, its C. L. O'Brien Well No. 1 located in Unit A of said Section 7.
- CASE 4036: (Continued from the February 5, 1969, Examiner Hearing) Application of Mobil Oil Corporation for a dual completion, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for the dual completion (conventional) of its C. L. O'Brien Well No. 1 located in Unit A of Section 7, Township 8 South, Range 30 East, Chaves County, New Mexico, to produce oil from an undesignated Pennsylvanian oil pool and the Lightcap (Devonian) Pool through parallel strings of tubing.
- CASE 4053: Application of El Paso Products Company for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Gallegos-Gallup Pool, San Juan County, New Mexico, including provisions for the classification of oil and gas wells, 80-acre spacing for oil wells, and 320-acre spacing for gas wells.
- CASE 4054: Application of Amerada Petroleum Corporation for an unorthodox oil well location and amendment to Order No. R-2197, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill a producing oil well at an unorthodox location 1250 feet from the West line and 2220 feet from the South line of Section 28, Township 24 South, Range 30 East, in its Langlie Mattix Workover Unit Waterflood Project, Langlie-Mattix Pool, Lea County, New Mexico. Applicant also seeks the amendment of Order No. R-2197, which order authorized said waterflood project, to establish an administrative procedure whereby said project could be expanded to include additional lands and injection wells and producing wells at orthodox and unorthodox locations as may be necessary to complete an efficient injection and producing pattern without the necessity of showing well response.

- CASE 4055: Application of Albert Gackle 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 open-hole interval from approximately 3290 feet to 3620 feet in his George Etz Well No. 3 located in Unit N of Section 27, Township 23 South, Range 36 East, Jalmat Pool, Lea County, New Mexico.
- CASE 4056: Application of Albert Gackle for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Lower Queen formation in the perforated interval from approximately 3642 feet to 3699 feet in his Sinclair "A" State Well No. 5 located in Unit I of Section 23, Township 23 South, Range 36 East, Langlie-Mattix Pool, Lea County, New Mexico.
- CASE 4057: Application of Charles B. Read for special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special rules for the Quail-Queen Pool, Lea County, New Mexico, including a provision for 80-acre spacing and proration units.
- CASE 4058: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from approximately 3874 feet to 3951 feet in their State Well No. 2 located in Unit K of Section 16, Township 21 South, Range 34 East, West Wilson Pool, Lea County, New Mexico.
- CASE 4059: Application of Hiram W. Keith and Dalton Haines for salt water disposal, Eddy County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the Delaware formation in the open-hole interval from approximately 4030 feet to 4158 feet in their Eddy "AGA" State Well No. 2 located 660 feet from the North line and 1650 feet from the West line of Section 36, Township 26 South, Range 31 East, North Mason-Delaware Pool, Eddy County, New Mexico.
- CASE 4060: Application of Sidney Lanier for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Yates-Seven Rivers formations in the open-hole interval from approximately 3402 feet to 3650 feet in his I. B. Ogg "A" Well No. 5 located in Unit J of Section 35, Township 24 South,

(Case 4060 continued)

Range 36 East, Jalmat Yates-Seven Rivers Pool, Lea County, New Mexico.

CASE 4061: Application of Millard Deck Oil Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers and Queen formations in the open-hole interval from approximately 3752 feet to 3872 feet in its Atha Well No. 1 located in Unit M of Section 31, Township 21 South, Range 36 East, South Eunice Pool, Lea County, New Mexico.

CASE 4062: Application of Kersey & Company for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Queen formation in the perforated interval from approximately 1835 feet to 1870 feet in the Bass Well No. 3 located in Unit F of Section 12, Township 19 South, Range 28 East, East Millman Queen-Grayburg Pool, Eddy County, New Mexico.

CASE 4063: Application of Kerr-McGee Corporation for the creation of a new gas pool and special pool rules, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new pool for the production of gas from the Morrow formation by its Nix Well No. 1 located in Unit L of Section 11, Township 19 South, Range 26 East, Eddy County, New Mexico, and for the promulgation of special pool rules therefor, including a provision for 640-acre spacing.

CASE 4064: Application of Atlantic Richfield Company for salt water disposal, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the San Andres formation in the perforated interval from approximately 4207 feet to 4286 feet in its Tucker Well No. 4 located in Unit O of Section 23, Township 7 South, Range 32 East, Chaveroo-San Andres Pool, Roosevelt County, New Mexico.

CASE 4065: Application of Humble Oil & Refining Company for an unorthodox oil well location and reclassification of a water well to an oil well, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to have its New Mexico State "S" Water Source Well No. 4 (CP-427), located at an unorthodox oil well location 650 feet from the West line and 175 feet from the

South line of Section 2, Township 22 South, Range 37 East, Lea County, New Mexico, reclassified as an oil well for the production of oil an undesignated San Andres Oil Pool and authority to produce same as an oil well.

- CASE 4066: Application of Humble Oil & Refining Company for the consolidation of two non-standard gas proration units, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of two existing non-standard 320-acre gas proration units into one standard 640-acre unit comprising all of Section 26, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its New Mexico State "G" Wells Nos. 2 and 4 located in Units P and G, respectively, of said Section 26. Applicant further seeks authority to produce the allowable assigned to said unit from either of said wells in any proportion.
- CASE 4067: Application of Benson-Montin-Greer Drilling Corporation for special pool rules, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks the promulgation of special pool rules for the La Plata-Gallup Pool, San Juan County, New Mexico, including a provision for 160-acre spacing and proration units. Applicant further requests that said special rules provide that the unit allowable for a 160-acre unit in said pool be allocated on the basis of four times the normal unit allowable for Northwest New Mexico, and that no credit be given for depth factors. Applicant further requests that said special rules be limited in their application to the exterior boundaries of the La Plata-Mancos Unit Area.
- CASE 4068: Application of Martin Yates III for salt water disposal, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Delaware formation in its Yates & Hanson McCord Well No. 1 located in Unit E of Section 22, Township 23 South, Range 26 East, Dark Canyon Field, Eddy County, New Mexico. Applicant further seeks a procedure whereby its Cordie King Well No. 2 located in Unit K of said Section 22 may be approved for the disposal of salt water without the requirement of notice and hearing.

Examiner Hearing
February 26, 1969

CASE 4045: (Continued from the February 5, 1969 Examiner Hearing)
Application of H & S Oil Company for an amendment to Order No. R-3357, as amended by Order No. R-3357-A, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the amendment of Order No. R-3357, as amended by Order No. R-3357-A, which order authorized the H & S West Artesia Unit Unit Waterflood Project. Applicant proposes to substitute the Roach Drilling Company-Leonard Well No. 18 located in Unit D of Section 17 as a water injection well in said project in lieu of the Cities Service-Mell Well No. 17 located in Unit M of Section 8, both in Township 18 South, Range 28 East, Artesia Pool, Eddy County, New Mexico.

CASE 4069: Application of Union Oil Company of California for the creation of a new pool, assignment of discovery allowable, and the promulgation of special pool rules, Lea County, New Mexico.

Applicant, in the above-styled cause, seeks the creation of a new Devonian oil pool for its Midway State Well No. 1 located in Unit F of Section 12, Township 17 South, Range 36 East, Lea County, New Mexico, and for the assignment of an oil discovery allowable in the amount of approximately 57,380 barrels to said well. Applicant further seeks the promulgation of special pool rules for said pool, including a provision for 80-acre proration units.

CASE 4070: Application of C. E. LaRue and B. N. Muncy, Jr., for salt water disposal, Lea County, New Mexico. Applicants, in the above-styled cause, seek authority to dispose of produced salt water into the salt and Yates formations in the open-hole interval from approximately 1254 feet to 3000 feet in the La Rue-Muncy John "B" Well No. 2 located in Unit A of Section 35, Township 17, South, Range 32, East, Maljamar Grayburg-San Andres Pool, Lea County, New Mexico.

Memo

From
D. S. NUTTER
CHIEF ENGINEER

To Humble Oil & Refg Co.

reclassify N. M. St. S
Lease Water source
Well #4 ~~3~~ [CP-427]
from ~~water~~ well to oil
well ^{to} produce from under
San Andres oil pool
^{unassigned loc}
located, 650' FWL
175' FSL

2-T225-K37E Reg
~~San Andres unassigned~~