

Case Number 4800

Application
Trascripts

Small Exhibits

ETC

25

1

2

3

5

б

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION STATE LAND OFFICE SANTA FE, NEW MEXICO Wednesday, August 23, 1972 at 9:45 A. M.

EXAMINER HEARING

IN THE MATTER OF:

Application of Mobil Oil Corporation for waterflood expansion and capacity allowable, Lea County, New Mexico.

Case No. 4800

BEFORE: RICHARD L. STAMETS, Examiner

TRANSCRIPT OF HEARING

2

3

4

5

6

7

8

9

10

11

12

13

14

15

1ú

17

18

19

20

21

22

23

24

INER: We will call

THE EXAMINER: We will call case 4800.

PROCEEDINGS

MR. HATCH: Case 4800, application of Mobil Oil Corporation for waterflood expansion and capacity allowable, Lea County, New Mexico.

MR. SPERLING: I am J. E. Sperling of Albuquerque appearing for the applicant Mobil Oil Corporation. We have one witness.

(Whereupon, Mr. W. B. Simmons, Jr. was called to the stand and sworn.)

MR. W. B. SIMMONS, JR.

having been first duly sworn according to law, upon his oath, testified as follows:

DIRECT EXAMINATION

BY MR. J. E. SPERLING:

- Q Please state your name, your employer and the position in which you are employed.
- A I am W. B. Simmons, Jr., employed as an associate engineer in the proration group for the Midland division office of Mobil Oil Corporation.
- Have you on any previous occasion testified before the Commission so that your qualifications are a matter of record?
- 25 A Yes, I have.

5

6

7

8

9

10

11

12

13

14

15

îó

17

18

19

20

21

22

23

24

25

Q

NEW MEXICO 8710: MEXICO 87108 SIMMS BLDG. + P.O. BOX 1092 + PHONE 243-6691+ ALBUQUERQUE. 1210 * IRST NATIONAL BANK BLDG. EAST+ALBUQUERQUE. NEW

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

> THE EXAMINER: They are.

- (By Mr. Sperling) What is Mobil seeking by this application, Mr. Simmons?
- Mobil Oil Corporation by this application seeks to expand the Bridges State water flood project to include the Bridges State well number 12 located in Unit P of Section 26 and Bridges State well number 174 located in Unit J of Section 15 all in Township 17 South, Range 34 East, Vacuum Grayburg-San Andres pool, Lea County, New Mexico. Also requested is the authority to produce Bridges State well number 12 at capacity.
 - Would you give us a brief history of the Bridges State water flood project?
- Mill's Bridges State water flood was initiated in 1958 and has, through several expansions, extended to the present limits as proposed on Exhibit 1, a plat of the water flood area. This area contains approximately 4280 acres. After two major expansions completed in 1970 there were substantial responses to the water injection programs as shown on Exhibit 2, the production history graph for the project. It is a response from the last project expansion that we are concerned with at this hearing. Had there been any Commission action with regard to this

6 7 8 9 10 11 12 13 209 SIMMS BLDG. * P.O. BOX 1092 * PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO 1216 F:RST NATIONAL BANK BLDG. EAST • ALBUQUERQUE, NEW MEXICO 14 15

16

17

18

19

20

21

22

23

24

25

Α

1

2

3

5

application prior to this hearing? Yes. Mobil's letter of July 10, 1972 requested this Α Mobil was expansion be administratively approved. informed by the Commission that these two wells could not qualify under Rule 701-E and that the applicant must therefore -- application must therefore be set for hearing. However at Mobil's request the Commission did grant the Bridges State well number 12 a temporary allowable increase supplement number 164 dated July 1972 from the present top of 80 barrels of oil per day to a new top allowable of 100 barrels per day. This extra production of over 80 barrels per day is subject to being compensated for by underproduction at some future date unless a project area is extended to include well number 12. Was there some unusual circumstances that affect the Q Commission's consideration so far as well number 12 is concerned?

Yes, there is. Referring to Exhibit 1, you can see that the normal water injection pattern has not been extended to all of the south boundary of the project. This was as a result of the denial issued in case number 4368 Order R number 3940-A in which Mobil requested an authority to convert wells 15 and 25 located respectively in Units O and I of Section 26, Township 17 South, Range 34 East, Lea County, New Mexico. You will note that both

dearnley, meier & mc cormick

200 SIMMS BLDG.0-P.O. BOX 1092.1PHONE 248-66910-ALBUQUERQUE, NEW MEXICO 87108 1210 First national bank bldg. East Oalbuquerque, new mexico 87108 these wells are direct offsets to well number 12 and their conversion to water injection would have gualified well number 12 for an administrative inclusion into the project area.

- Q Mr. Simmons, in view of the fact that the Commission's position that there was not justification for administrative approval under Rule 701-E-2 which provides that additional proration units not directly or diagonally offsetting an injection tract may be included in the project area--if after notice and hearing it has been established that such additional units have wells completed thereon which have experienced a substantial response to water injection, is Mobil asking approval of the application which is the subject of this hearing under this provision?
- A Yes, we are. Mobil bolieves that these wells can qualify under this for such consideration under this rule.
- Q What evidence do you have that will show that there has been a response in these wells to the water injection wells in the area?
- Well, I plan to discuss well number 12 first and well 174 second. Exhibits number 3 through 8 are individual graphs of well tests showing both oil and water volumes for the well or for the wells in the area of well number 12.

 Exhibit 3 is a test history of well number 12 and shows

3

5

6

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

that it was acidized on July 25, 1971 to clean out the well bore and increase production. After the workover the well tested 61 barrels of oil per day on August 2nd, 1971. This increase in production was short-lived for by October 6, 1971 the well test was down to 37 barrels of oil per day. However, from this time on the well tests have indicated an average increase in production. In my opinion this well has experienced substantial response to the water flood since the latter part of October 1971 and most likely from the nearest water injection wells, Bridges State wells number 30 and 35 in Section 26. Injection in these two wells began in July 1970 and an estimated cumulative water injection as of August 23, 1972 is 180,000 barrels for well number 30 and 392,000 barrels for well number 35. Are there other water injection wells in the vicinity on

- offsetting leases which might be responsible at least in part for this response?
- A No. Mobil has the only water injection wells in the area as the other operators have not started a water flood project yet.
- Have other wells in the immediate area of well number 12 shown a response which might be indicative of the response effect insofar as 12 is concerned?
- 25 A Yes. I would like to introduce the Exhibits 4 through 7

2

3

5

6

7

8

9

10

11

12

and these are the graphs showing the test history of wells number 15, 26, 33 and 25. Exhibit 4 is a graph for well number 15. It shows a reversal ir. decline shortly after injection started in wells 30 and 35 in July of 1970. Since then the average test results show a steady increase in production. Exhibit 5 is a graph for well number 25. It shows the immediate effect of a successful workover in May 1970 with a rapid decline until it responded to the water injection into well number 30 and started in July 1970. The response was sharp and had stabilized at a level three times higher than before injection began. Exhibit Number 6 is a graph for well number 26 and shows a quick positive response with the oil production leveling off at an average of ten times greater than production before injection. Exhibit 7 is a graph for well number 33. It showed immediate response and then dropped off sharply after December 1970. After the well was pulled in October 1971 total produced fluid again rose but started declining again at a lower rate. I believe this can be explained in the sign for the need of workover or equipment change in the well. What conclusions do you draw from the data which is indicated on the exhibits to which you have referred, 21 22 In my opinion the entire area southeast part of Section 23 4 through 7.

SIMMS BUDG. P.O. BOX 1082 PHONE 243-6691 ALBUQUERQUE. NEW MEXICO 87108 18 19 20

17

24

25

A

dearnley, meier & mc cormick

7103	
209 SIMMS BLDG P.O. BOX 1092 PHONE 243-6691+ ALBUQUERQUE, NEW MEXICO 87103	1216 FIRST NATIONAL BANK BLDG. EAST * ALBUQUERQUE, NEW MEXICO 87108

		PAGE 9
1		26 lying southeast of injection wells 29, 35, 30 is
2		experiencing a substantial response to water injection
3		from Mobil's Bridges State water injection project.
4	Q	Does the project in the vicinity of well number 12 have
5		any back-up?
6	A	No, it does not.
7	Q	What is the result of that?
8	A	Since there is no back-up for Mobil's Bridges State water
9		flood project by a lease line injection wells or some
10		natural barrier it is my Opinion that Mobil Oil's reserve
11		will migrate off lease thereby being lost to Mobil's well
12		This probability was firmly attested to by Marathon Oil
13		Company and Continental Oil in Examiner's Case Number 436
14		and 4368.
15	Q	I take it then that it is your opinion that without the
16		inclusion of well number 12 into the project that Mobil's
17		correlative rights will be adversely affected by the
18		migration of oil from Mobil's lease?
19	A	Yes, definitely.
20	Q	Now, would you refer to well 174 and indicate what response
21		if any it has shown to the water injection.
22	A	If we can refer to Exhibit Number 8 which is a graph of a
23		daily production of well number 174, the well was
24		completed just lately in April of 1972 and potential on
25		May 21st, 1972 was for four barrels of oil plus 82 barrels

Q Α 209 SIMMS BLDG. * P.O. BOX 1092 * PHONE 243-6691 * ALBUQUERQUE. NEW MEXICO 87108 1210 FIRST NATIONAL BANK BLDG. EAST * ALBUQUERQUE. NEW MEXICO 87108

of water with gas volumes too small to measure. Fluid production dropped initially in May 1972 to three barrels of oil plus 70 barrels of water per day and then sharply increased in July of 1970 to eight barrels of oil plus 33 barrels of water. I believe that this response is caused primarily by the 770,000 barrels of accumulative injection into water injection well number 66 and the some 1,700,000 barrels of accumulative injection into water injection well number 62.

- Do you have any other reasons for asking for the inclusion of 174 into the project?
- Yes. In addition to the substantial response shown by
 well number 174 it is an addition to the Bridges State
 water flood project—it would eliminate unnecessary paper
 work and a need for separate reporting. Also as the well
 work and a need for separate reporting as the well
 further responded to the water flood well number 174 will
 then he able to produce capacity and protect Mobil's
 correlative rights in that area.
 - Q Do you have any other evidence pertinent to this application?
 - Yes. Exhibit 9 is a letter from the office of the

 Commissioner of Public Land stating that they had no

 commissioner of Public Land stating that they had no

 objection to the inclusion of these wells into the project

 objection to the commission's approval. Also there is

 area subject to the Commission's approval. Oil

3

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

Company Exhibit Number 10 stating they have no objection to well number 12 being included in the project area.

- Do you have anything further?
- I have nothing further.

MR. SPERLING: I would like to offer Exhibits 1 through 10 at this time, Mr. Examiner.

THE EXAMINER: Without objection Exhibits 1 through 10 will be admitted into evidence.

Are there questions of this witness?

Mr. Simmons, have the other wells offsetting well number 174 experienced an effect from the water flood?

THE WITNESS: No, sir, not as sharp as this. checked that and it is my thoughts that it is 174 that is feeling this response from these two closest wells but 68 nor 167, neither one, have shown any sharp increase such as 174.

THE EXAMINER: Do you have any knowledge of any unique reservoir characteristics that are causing well number 174 and number 12 to experience these increases while offsetting wells are not experiencing them or not experiencing them as much?

THE WITNESS: I would like to answer that question in two parts. I think number 12 shows a normal situation whereas the whole southeast part of Section 26 does exhibit response. All those wells shown there exhibit some sort of response, but now 174 there must be a unique situation there

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

SIMMS BLDG. P.O. BOX 1002 PHONE 243-5691-64 LBUQUERQUE. 1210 FIRST NATIONAL BANK BLDG. EAST-64 BUQUERQUII, NEW

but it is a new well. It was completed under new methods and I have no reason to explain that and no way of explaining it, but we were able to show the response on the graph and I thought it would be helpful to do so.

THE EXAMINER: You gave us three tests, I believe, or three different rates of production on that. I wonder if you would repeat those and then calculate the total fluid on each one of those.

THE WITNESS: That would be in relation to Exhibit 8?

THE EXAMINER: Yes.

THE WITNESS: The potential was 86 and fluid production dropped then to 73 and then sharply increased to 41. We drilled into an area where I would have expected some build-up in reservoir pressures due to it being an undrilled area and we got what was there which was a lot of water and a little bit of oil and now that the oil is increasing, whereas the total fluid volume is not increasing, we have, I think, after the well drew off that initial surge of pressure there it will respond in a normal way. I think we will be experiencing additional increases.

THE EXAMINER: To your knowledge have the producers offsetting your well number 12 experienced any increase in production?

THE WITNESS: No. I was unable to ascertain whether

24

25

б

they had or not, but there was considerable testimony during these hearings that we had that we probably aren't producing from the same zones in those areas and this is something I would expect. However, they should experience some response if they do produce from that zone at any later time.

THE EXAMINER: In both cases it is your feeling that if you are not allowed to include these wells in the project area and get the benefit of water flood allowables that oil will be lost?

THE WITNESS: Yes, sir.

THE EXAMINER: Will this be permanently lost?

THE WITNESS: In the case of 174 if and when that happens, yes. There are no wells in that area to recover it. In the case of well number 12 where we are offset by Marathon and Continental, I am sure that they would assist in the recovery of Mobil's oil in every way that they could, but we would not be able to recover it.

THE EXAMINER: Are there other questions of the witness? You may be excused.

We will take this case under advisement.

1	ĪNDEX	
2	WITNESS	<u> PAGE</u>
3	MR. W. B. SIMMONS, JR.	
4	Direct Examination by Mr. J. E. Sperling	3
5		
6	<u>EXHIBITS</u>	
7		PAGE
8	Exhibit l - Plat of water flood area	11
10	Exhibit 2- Production history graph for project	11
11 12	Exhibit 3 - Test history of well number 12	11
13	Exhibit 4 - Graph for well number 15	11
14 15	Exhibit 5 Graph for well number 25	11
16	Exhibit 6 - Graph for well number 26	11
17	Exhibit 7 - Graph for well number 33	11
18 19	Exhibit 8 - Graph of daily production of well number 174	11
20 21	Exhibit 9 - Letter from office of Commissioner of Public Land	11
22	Exhibit 10 - Waiver from Continental Oil Company	11
23 24		
25		

P.O. BOX 1092 *PHONE 243-6691 * ALBUQUERQUE, NEW MEXICO 87103 Tio..al bank blog. East * Albuquerque, new mexico 87108

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

I, MARCIA J. HUGHES, Court Reporter, do hereby certify that the above and foregoing pages are a true and correct transcript of the proceedings had before the New Mexico Oil Conservation Commission on Wednesday, August 23, 1972.

marcia Mughen

What I thing to



OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2008 - SANTA FE 87501

September 6, 1972

BRUCE KING CHAIRMAN LAND COMMISSIONER ALEX J. ARMEJO MEMBER STATE GEOLOGIST

A. L. PORTER, JR. SECRETARY - DIRECTOR

GOVERNOR

R	le :	Case No	4800	
Mr. James E. Sperling Modrall, Seymour, Sperling, Roel	hī	Order No.	R-4385	
& Harris		Applicant:		
Attorneys at Law Post Office Box 2168		Mobil Oil Corporation		
Albuquerque, New Mexico 87103			· · · · · · · · · · · · · · · · · · ·	

Dear Sir:

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

A. L. PORTER, Jr. Secretary-Director

ALP/ir					
Copy of order	also s	ent to:			
Hobbs OCC Artesia OCC	X	-			
Aztec OCC					
Other	State	Engineer	Office		

BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 4800 Order No. R-4385

APPLICATION OF MOBIL OIL CORPORATION FOR WATERFLOOD EXPANSION AND CAPACITY ALLOWABLE, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23, 1972, at Santa Fe, New Mexico, before Examiner Richard L. Stamets.

NOW, on this 6th day of September, 1972, 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, Mobil Oil Corporation, seeks permission to expand the Bridges State Waterflood Project in the Vacuum Grayburg-San Andres Pool, Grayburg-San Andres formation, by the addition of two producing wells to the project area being its Bridges State Wells Nos. 12 and 174, located, respectively, in Unit P of Section 26 and Unit J of Section 15, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.
- (3) That said wells are located adjacent to applicant's Bridges State Water Flood Project in said pool but are not directly or diagonally offset by an injection well in the project.
- (4) That said wells have experienced a response to the injection of water into the Bridges State Water Flood Project.
- (5) That if said wells are not permitted to produce at rates commensurate with wells in their Bridges State Water Flood Project in accordance with Commission Rule 701 E, oil may be swept past the wells and lost to undrilled acreage or across lease lines.

-2-CASE NO. 4800 Order No. R-4385

- (6) That expansion of the Bridges State Water Flood project area to include applicant's said wells No. 12 and No. 174 will tend to prevent waste and protect correlative rights.
- (7) That applicant's request for assignment of capacity allowable to its Bridges State Well No. 12 in Unit P of said Section 26 should be dismissed, as said request is made unnecessary by Commission Order No. R-4381.
- (8) That said well No. 12 has been producing with a temporary allowable in excess of the top pool allowable and that any production by this well in excess of the top pool allowable during the temporary allowable period should be legal oil and should not be made up by underproduction.

IT IS THEREFORE ORDERED:

- (1) That Mobil Oil Corporation's Bridges State Water Flood Project is hereby expanded to include Unit J of Section 15 and Unit P of Section 26, both in Township 17 South, Range 34 East, NMPM, Vacuum (Grayburg-San Andres) Pool, Lea County, New Mexico.
- (2) That monthly progress reports of the expanded water-flood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (3) That any production in excess of the top pool allowable produced by applicant's Bridges State Well No. 12 in said Section 26 under a temporary allowable in excess of the top pool allowable shall be legal oil provided that it was not in excess of said temporary allowable.

IT IS FURTHER ORDERED:

- (1) That the applicant's request for the assignment of capacity allowable to its Bridges State Well No. 12 in Unit P of said Section 26 is hereby dismissed.
- (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

BRUCE KING, Chairman

A. L. FORTER, Jr., Metor & Secretary

DOCKET: EXAMINER HEARING- WEDNESDAY - AUGUST 23, 1972

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

The following cases will be heard before Richard L. Stamets, Examiner, or Daniel S.

Nutter, Alternate Braminer: CASE 4775: (Continued from the July 26, 1972 Examiner Hearing)

Application of Continental Oil Company for amendment of special pool rules, Lea County, New Mexico. Applicant, in the above-styled cause, seeks amendment of the special rules and regulations governing the Blinebry Pool, Lea County, New Mexico, to provide for annual bottomhole pressure, gas-oil ratio, and gas-liquid tests in the pool. Applicant further seeks the designation of oil areas and gas areas in the pool with allowables within each area equalized on a per-acre basis and total withdrawals from the gas area to be volumetrically equivalent to the total withdrawals from the oil area.

Applicant further seeks to extend the vertical limits of the Blinebry Pool down to the top of the Tubb Pool.

Also to be considered by the Commission on its own motion will be amendment of the special rules and regulations to require that intermediate or low-pressure gas be charged against a well's allowable; elimination of the requirement to conduct bottom-hole pressure, gasoil ratio, and gas-liquid tests; and to require that all gas production be reported on Form C-111.

CASE 4779: (Continued from the July 26, 1972, Examiner Hearing)

Application of Merrion & Bayless for a non-standard proration unit, Sam Juan County, New Mexico. Applicant, in the above-styled cause, seeks approval of a 160-acre non-standard gas proration unit comprising the SE/4 of Section 35, Township 30 North, Range 12 West, within one mile of Flora Vista-Mesaverde Pool, San Juan County, New Mexico, to be dedicated to its Carnahar Well No. 1 located in Unit P of said

- CASE 4798: In the matter of the hearing called by the Oil Conservation Commission on its own motion to consider revision of Rule 301 E of the Commission Rules and Regulations to provide for unrestricted allowables for waterflood projects and to eliminate the necessity of response for administrative approval of additional injection wells.
 - In the matter of the hearing called by the Oil Conservation Commission on its own motion to amend Rule 306 of the Commission Rules and Regulations to incorporate therein the provisions of Order No. R-4070 which CASE 4799: regulate the flaring or venting of casinghead gas.

-2-

CASE 4807: In the matter of the hearing called by the Oil Conservation Commission on the own motion for the amendment of Rule 104 C. I of the Commission Rules and Regulations to permit the drilling of development oil wells as close as 330 feet to another well on the same unit drilling to or capable of producing from the same pool.

CASE 4800: Application of Mobil Oil Corporation for waterflood expansion and capacity allowable, Lea County, New Mexico. Applicant, in the above-styled cause, seeks to expand its Bridges State Waterflood Project, Vacuum Grayburg-San Andres Pool, Lea County, New Mexico, by the addition of its Bridges State Wells Nos. 12 and 174 located, respectively, in Unit P of Section 26 and Unit J of Section 15, Township 17 South, Range 34 East.

> Applicant further seeks the assignment of capacity allowable to said Well No. 12.

- CASE 4801: Application of The Petroleum Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Parkway West Unit Area comprising 3840 acres, more or less, of State lands in Sections 20, 21, 22, 27, 28, and 29 of Township 19 South, Range 29 East, Eddy County, New Mexico.
- CASE 4802: Application of Crown Central Petroleum Corporation for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, sacks authority to dispose of produced salt water into the Grayburg formation in the open-hole interval from 4011 feet to 4083 feet in its Fred Turner Well No. 2 located in Unit O of Section 6, Township 20 South, Range 38 East, Skaggs (Grayburg) Pool, Lea County, New Mexico.
- CASE 4803: Application of Yates Petroleum Corporation to directionally drill and an unorthodox location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to re-enter a dry hole having an unorthedox surface location 1980 feet from the North line and 660 feet from the East line of Section 25, Township 18 South, Range 25 East, Eddy County, New Maxico, and to directionally drill in such a manner as to bottom the well in the West Atoka-Morrow Gas Pool at an unorthodox bottom hole location 500 feet from the North line and 600 feet from the East line of said Section 25. The N/2 of said Section 25 to be dedicated to the well.
- Application of Dugan Production Corporation for downhole commingling CASE 4804: and a non-standard proration unit, San Juan County, New Mexico. Applicant, in the above-atyled cause, seeks as an exception to Rule 303 of the Commission Rules and Regulations, authority to commingle oil production from the Amarillo-Gallup Oil Pool and gas from the

(Case 4804 continued)

Basin-Dakota Pool in the wellbore of its Fullerton Well No. 1 located 1850 feet from the North and West lines of Section 34, Township 28 North, Range 13 West, San Juan County, New Mexico. Applicant further seeks approval for a non-standard 160-acre gas proration unit for the Basin-Dakota Pool comprising the NW/4 of said Section 34 to be dedicated to the subject well.

- CASE 4805: Application of W. C. Montgomery for a non-standard proration unit, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an 80-acre non-standard oil proration unit comprising the NE/4 NE/4 of Section 20 and the NW/4 NW/4 of Section 21, Township 8 South, Range 38 East, Bluitt-San Andres Associated Pool, Roosevelt County, New Mexico, to be dedicated to a well to be drilled in the NE/4 NE/4 of said Section 20.
- CASE 4806: Southeastern New Mexico nomenclature case talling for an order for the creation, extension, contraction and abolishment of certain pools in Lea, Chaves, Eddy and Roosevelt Counties, New Mexico.
 - (a) Create a new pool in Eddy County, New Mexico, classified as a gas pool for Cisco production and designated as the Boyd-Cisco Gas Pool. The discovery well is the David Fasken Arco "9" Morrison No. 1 located in Unit B of Section 9, Township 19 South, Range 25 East, NMPM. Said pool would comprise:

TOWNSHIP 19 SOUTH, RANGE 25 EAST, NMPM SECTION 9: N/2

(b) Create a new pool in Chaves County, New Mexico, classified as an oil pool for Queen production and designated as the South Lucky Lake-Queen Pool. The discovery well is the Dalport Oil Corporation Todhunter Federal No. 1 located in Unit F of Section 22, Township 15 South, Range 29 East, NAPM. Said pool would comprise:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM SECTION 22: SE/4 NW/4

(c) Create a new pool in Lea County, New Mexico, classified as a gas pool for Devonian production and designated as the East Ranger Lake-Devonian Gas Pool. The discovery well is the Union Texas Petroleum Corporation Shell State Com No. 1 located in Unit E of Section 6, Township 13 South, Range 35 East, NMPM. Said pool would comprise:

TOWNSHIP 13 SOUTH, RANGE 35 EAST, NMPM SECTION 6: W/2

(d) Abolish the Penrose Skelly-Grayburg Pool in Lea County, New Mexico, described as:

```
TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM
   SECTION 13: E/2
   SECTION 24: E/2
  SECTION 25: NE/4 and E/2 SE/4
  TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM SECTION 4: Lots 3, 4, 5, 6, 11, 12
               13, 14 and SW/4
  SECTION 7: S/2
SECTION 8: S/2 and NE/4
SECTION 9: W/2
  SECTION 16: S/2 and NW/4
  SECTION 17: A11
  SECTION 18: All
 TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
  SECTION 19: All
 SECTION 20: All
 SECTION 21: All
 SECTION 27: All
 SECTION 28: All
 SECTION 29: All
 SECTION 30: All
 SECTION 31: All
 SECTION 32: All
 SECTION 33: A11
 SECTION 34: All
SECTION 35: A11
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 2: All
SECTION 3: All
SECTION 4: All
SECTION 5: All
SECTION 6: E/2
SECTION 7: NE/4
SECTION 8: All SECTION 9: All
SECTION 10: All
SECTION 11: A11
SECTION 14: All
SECTION 15: All
SECTION 16: All
SECTION 17: E/2
```

(Case 4806 continued)

(e) Extend the vertical limits of the Langlie-Mattix Pool in Lea County, New Mexico, to include the Grayburg formation. Also, extend said Langlie Mattix Pool to include therein:

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM

SECTION 13: E/2

```
SECTION 24: E/2
SECTION 25: NE/4 and E/2 SE/4
TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
SECTION 4:
             Lots 3, 4, 5, 6, 11, 12,
             13, 14 and SW/4
SECTION 7:
             S/2
             S/2 and NE/4
SECTION 8:
SECTION 9:
             W/2
SECTION 16: S/2 and NW/4
SECTION 17: All
SECTION 18: All
SECTION 19: All
SECTION 20: All
SECTION 21: All
TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM
SECTION 27: All
SECTION 28: All
SECTION 29: All
SECTION 30: All
SECTION 31: A2.1
SECTION 32: All
SECTION 33: All
SECTION 34: All
SECTION 35: All
TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM
SECTION 2: All
SECTION 3: All
SECTION 4: All
SECTION 5: All
SECTION 6: E/2
SECTION 7: NE/4
SECTION 8: All
SECTION 9: All
SECTION 10: All
SECTION 11: A11
SECTION 14: All
SECTION 15: All
SECTION 16: All
SECTION 17: E/2
```

(f) Contract the Bagley-Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

> TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM SECTION 35: N/2 NW/4

(g) Extend the North Bagley-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

> TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM SECTION 35: N/2 NW/4

(h) Contract the Bough-Permo Pennsylvanian Pool in Lea County, New Mexico, by the deletion of the following described area:

TOWNSHIP 9 SOUTH, RANGE 36 EAST, NAPM SECTION 17: NW/4

(i) Extend the North Benson Queen-Grayburg Pool in Eddy County, New Mexico, to include therein:

> TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM SECTION 26: S/2 SW/4

(j) Extend the Bluitt-San Andres Associated Pool in Roosevelt County, New Mexico, to include therein:

> TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM SECTION 8: NW/4

(k) Extend the South Carlsbad-Atoka Gas Pool in Eddy County, New Mexico, to include therein:

> TOWNSHIP 23 SOUTH, RANGE 27 EAST, NMPM SECTION 7: W/2 SECTION 18: N/2

(1) Extend the South Carlsbad-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

> TOWNSHIP 23 SOUTH, RANGE 27 KAST, NMPM SECTION 7: S/2 SECTION 18: N/2

(m) Extend the Dos Hermanos-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 30 EAST, NMPM

SECTION 22: All

SECTION 27: All

Docket No. 19-72

Examiner Hearing - August 23, 1972

(n) Extend the South Empire-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 29 EAST, NMPM SECTION 6: S/2

(o) Extend the Fowler-Upper Yeso Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 24 SOUTH, RANGE 37 EAST, NMPM SECTION 10: SE/4 SECTION 11: SW/4

(p) Extend the Golden Lane-Strawn Gas Pool in Eddy County, New Mexico, to include therain:

TOWNSHIP 21 SOUTH, RANGE 29 EAST, NMPM SECTION 4: Lot 9, 10, 11, 12, 13, 14, 15 and 16

(q) Extend the Grayburg-Jackson Pool in Eddy County New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 30 EAST, NMPM SECTION 9: S/2

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

TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM SECTION 2: SW/4

(s) Extend the McDonald-Pennyslvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 36 EAST, NMPM SECTION 33: SE/4

(t) Extend the Sand Dunes-Cherry Canyon Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 31 EAST, NMPM SECTION 26: NW/4 NE/4

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

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM SECTION 27: SE/4 SE/4 SECTION 34: NE/4 NE/4

(v) Extend the Vada-Pennsylvanian Pool in Roosevelt County, New Mexico, to include therein:

Docket NO. 19-72

Examiner Hearing - August 23, 1972

(v continued from page 7 - Case 4806)

TOWNSHIP 8 SOUTH, RANGE 34 EAST, NMPM SECTION 34: SE/4

(w) Extend the Vest Ranch-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 30 EAST, NMPM SECTION 21: SE/4

(x) Extend the Washington Ranch-Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 25 SOUTH, RANGE 24 EAST, NMPM SECTION 27: All SECTION 35: W/2

TOWNSHIP 26 SOUTH, RANGE 24 EAST, NMPM SECTION 3: All SECTION 4: E/2

CASE 47861 (Continued from August 9, 1972, Examiner Hearing).

Application of Highland Production Company for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seaks authority to dispose of produced salt water into the Delaware formation in the open-hole interval from 4378 feet to 4418 feet in its Russell Federal Well No. 6 located in Unit K of Section 20, Township 26 South, Range 32 East, East Mason-Delaware Pool, Lea County, New Mexico,



Continental Oil Company

1001 North Turner Hobbs, New Mexico 88240

可以以以对

P.O. Box 460

(505) 393-4141

Western Hemisphere Petroleum Division

OIL CONSERVATION COMM.

Santa Fe

Gr. Com 4800

L. P. Thompson
Division Manager
Production Department
Hobbs Division

August 3, 1972

New Mexico 011 Conservation Commission P. O. Box 2088 Santa Fe, New Mexico 87501

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

Gentlemen:

Mobil- Bridges State Waterflood Project, Vacuum Grayburg San Andres Pool, Lea County, New Mexico

Continental has received a letter dated July 10, 1972, addressed to you requesting that its Bridges State Well No. 12, located in Unit P of Section 26, Township 17 South, Range 34 East, be considered for Administrative and allowable purposes as a part of the project area for their Bridges State Waterflood. Continental Oil Company is an offset operator to this well and has no objection to the well being included in the project area so that it can produce a higher allowable than that which would be afforded it under the Commission's normal allowable rules.

Yours very truly,

Manghan

CC:

Mobil Oil Corporation

P. 0. Box 633

Midland, Texas 79701

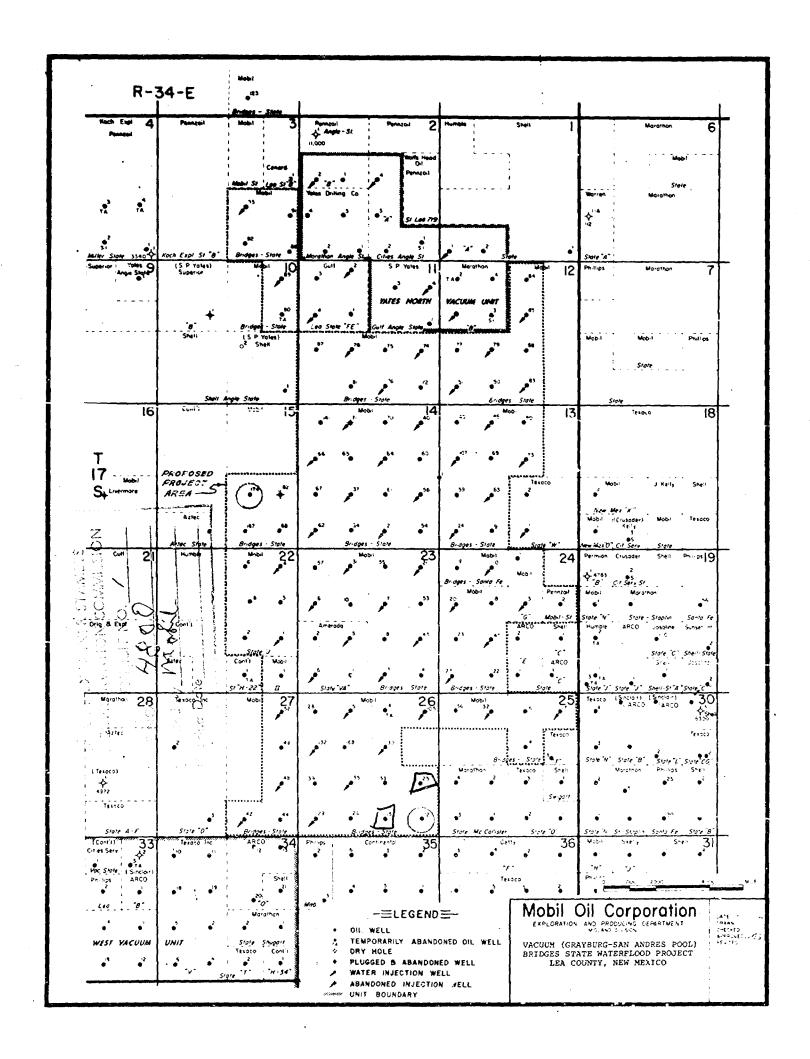
Attention Mr. Ira B. Stitt

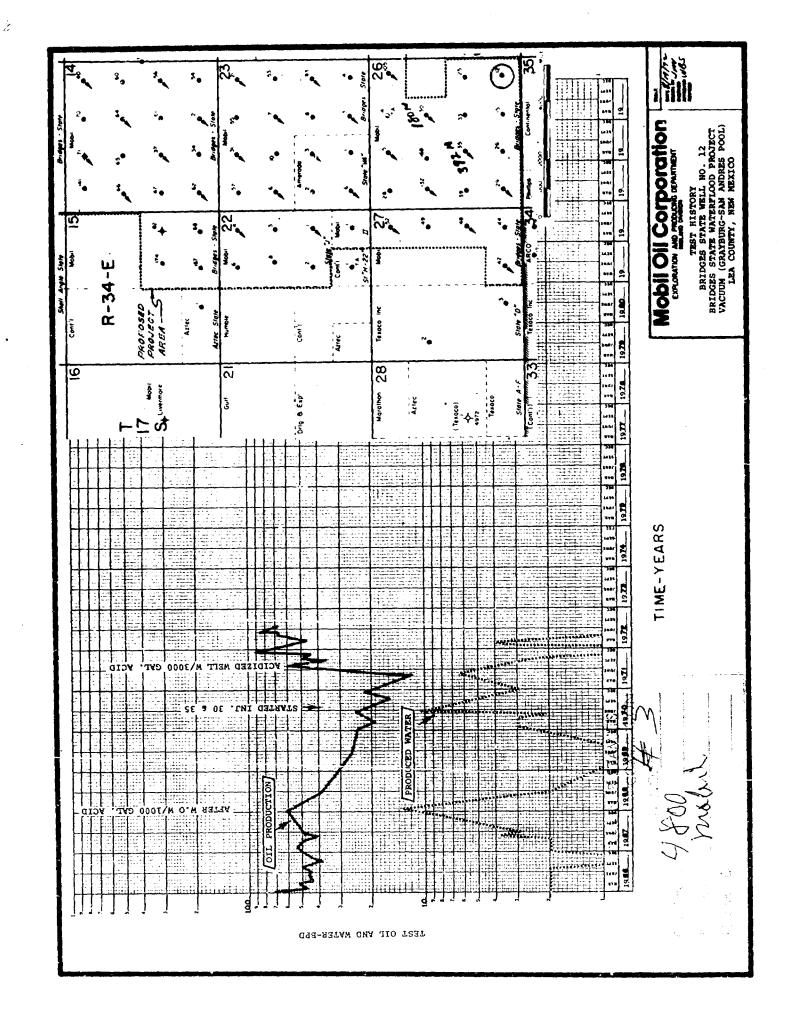
New Mexico 011 Conservation Commission P. O. Box 1980 Hobbs, New Mexico 88240

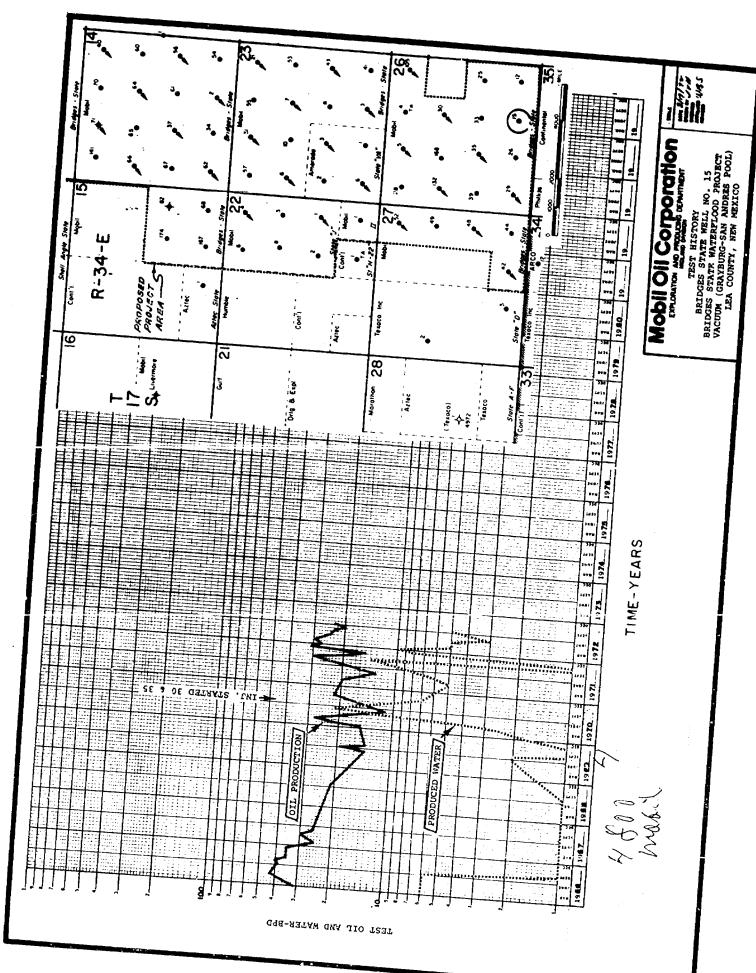
RLA

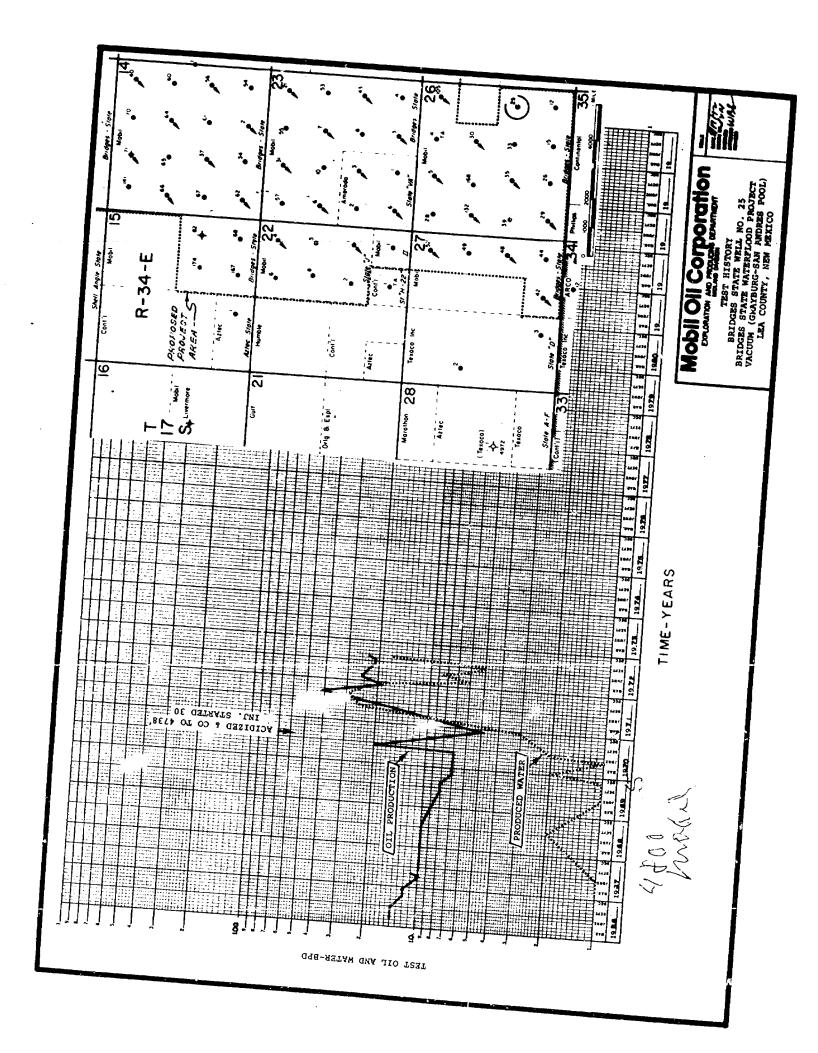
pocker were

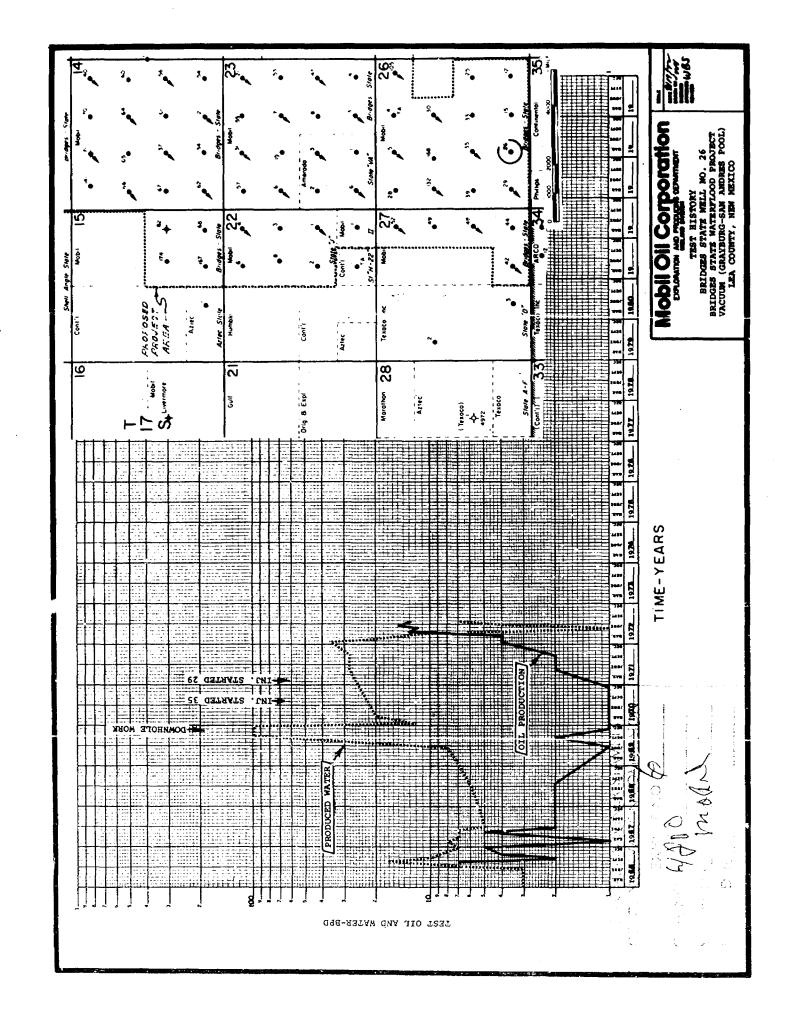
The 8-11-12

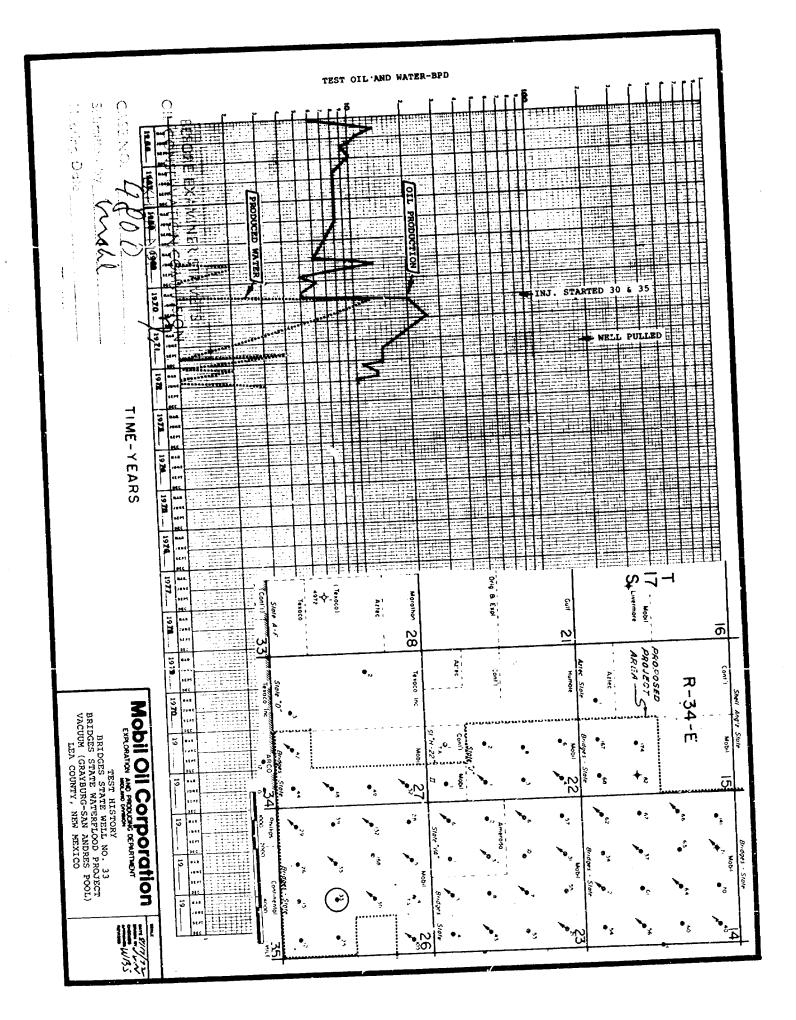


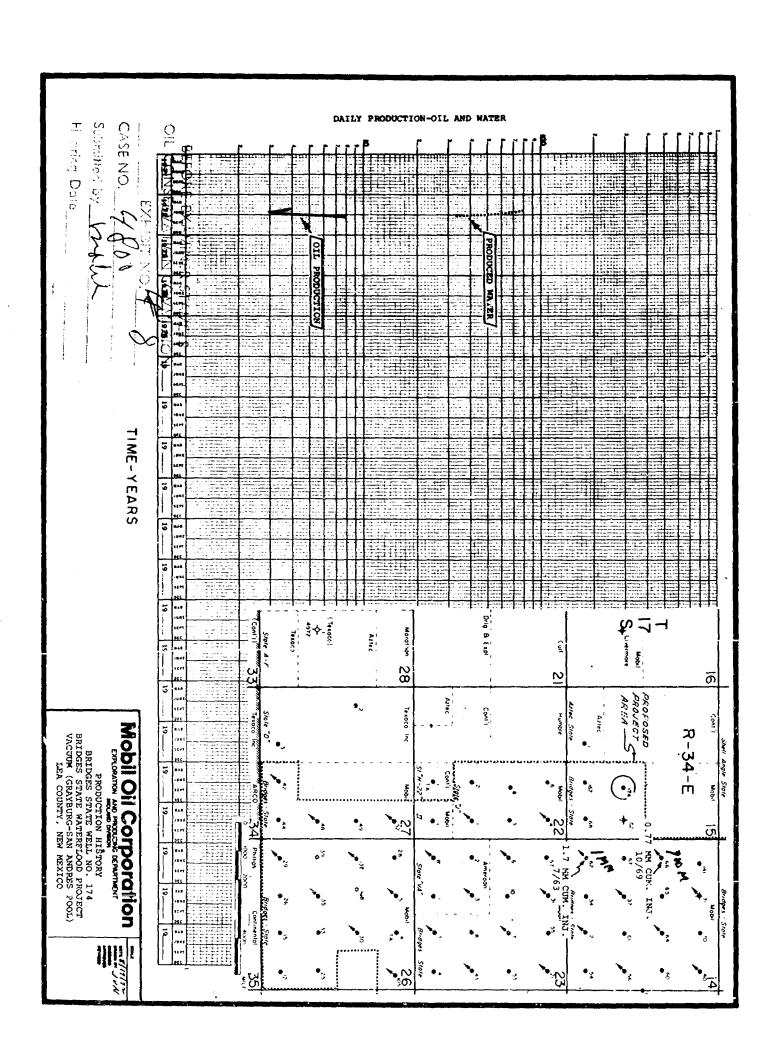








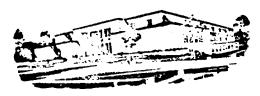




State of New Mexico



ALEX J. ARMIJO COMMISSIONER



commissioner of Public Lands August 1, 1972

P. O. BOX 1148 SANTA FE, NEW MEXICO

Mobil Oil Corporation P. O. Box 633 Midland, Texas 79701

RECEIVED HUG 3, 1972

Re:BRIDGES STATE WATERFLOOD PROJECT ORDER NO. R-1244. VACUUM (GRAYBURG-SAN ANDRES) POOL LEA COUNTY, NEW MEXICO

ATTENTION: Mr. Ira B. Stitt

Gentlemen:

Reference is made to your letters of July 6, 10, and 18 of 1972, whereby you request that the following wells be included in the Bridges State Waterflood Project Area. This office has no objection to the inclusion of these wells to the Project Area. This is subject to like acceptance by the New Mexico Oil Conservation Commission.

	accor.	Well	Unit	Section	Township	Range
	Lease Name & No. State J (B-1519) Bridges St.(B-1520-1) Bridges St.(B-1520-1) State II(B-2354-2)	No. 8 12 174	Letter G P J P	22 26 15 22	178 178 178 178	34E 34E 34E 34E
_	State II(D-23)4 17			1		

RAY D. GRAHAM, Director Oil and Gas Department

AJA/RDG/s

cc:

New Mexico Oil Conservation Commission

Leases B-1519, B-1520-1, and B-2354-2

(conoco

Hos. File

L. P. Thompson Division Manager Production Department Hobbs Division Western Hemisphere Petroleum Division Continental Oil Company P.O. Box 460 1001 North Turner Hobbs, New Mexico 88240 (505) 393-4141

August 3, 1972

New Mexico Oil Conservation Commission

P. O. Box 2088

Santa Fe, New Mexico 87501

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

AUG 1972

Aug (mu)

Gentlemen:

Mobil- Bridges State Waterflood Project, Vacuum Grayburg San Andres Pool, Lea County, New Mexico

Continental has received a letter dated July 10, 1972, addressed to you requesting that its Bridges State Well No. 12, located in Unit P of Section 26, Township 17 South, Range 34 East, be considered for Administrative and allowable purposes as a part of the project area for their Bridges State Waterflood. Continental Oil Company is an offset operator to this well and has no objection to the well being included in the project area so that it can produce a higher allowable than that which would be afforded it under the Commission's normal allowable rules.

Yours very truly,

SIGNED: L. P. THOMPSON

rw CC: Mobil Oil Corporation P. O. Box 633 Midland, Texas 79701

Attention Mr. Ira 8. Stitt

New Mexico Oil Conservation Commission P. O. Box 1980 Hobbs, New Mexico 882/10

RLA

Alfoo 10

From J. E. KAPTEINA ENGINEER Jo XM Hatch Case he Sill Summers case he wither had Jay 23 rather asked for Aug 23 rather than the 9th Conflicts than the 9th Conflicts without the 9th Conflicts and 10th Conflicts and 1 Memo

Care 4800

Mobil Oil Corporation

JUL 1 3 1972
OIL CONSERVATION COMM.
Santa Folly 10, 1972

P.O. BOX 633 MIDLAND, TEXAS 79701

New Mexico Oil Conservation Commission State Land Office Building P. O. Box 2088

Attention Mr. A. L. Porter, Jr.

Santa Fe, New Mexico 87501

BRIDGES STATE WATERFLOOD PROJECT ORDER NO. R-1244, VACUUM (GRAYBURG-SAN ANDRES) POOL LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Oil Corporation respectfully requests that the wells listed below and indicated with a red circle on the accompanying map be included in the project area of the Bridges State Waterflood Project.

<u>Lease Name</u>	Well No.	<u>Unit Letter</u>	Section	Township	Range
Bridges State	12	P	26	17S	34E
Bridges State	174	J	15	17S	34E

Well #12 is located at the extreme south edge of the Bridges State Waterflood Project. It was acidized on July 25, 1971 to clean out the well bore and increase production. On August 2, 1971, it potentialed for 61 barrels of oil per day. This rate of production was short-lived because by October 6, 1971 the well tested for only 37 barrels of oil per day. However, as shown on the attached production tests tabulation, production from this well increased from 37 to 85 barrels of oil per day between October 6, 1971 and June 18, 1972. It is Mobil's opinion that the latter increase is waterflood response and not a result of the acid treatment. Injection wells nearest Well #12 are Nos. 30 and 35. Injection began in these two wells in July, 1970 and has continued ever since.

In Case No. 4368 (de novo) held before the Commission on September 16, 1970, Mobil requested authority to convert Wells 14, 15 and 25, located respectively in Unit G of Section 25 and Units O and I of Section 26, Township 17 South, Range 34 East, Lea County, New Mexico. The Commission denied Mobil's Application on the 10th day of November, 1970. Because this application was denied and Wells 15 or 25 could not be converted to injection service, Well #12 does not qualify under Rule 701-E to be included in the project area. However, it

J-11-12

is respectfully requested that the Commission consider placing this well in the project area by administrative action.

As stated earlier, Well #12 on the latest test pumped 85 barrels of oil per day. It is likely that the producing ability of this well will continue to improve. In order to prevent oil resulting from Mobil's waterflood efforts being swept off our lease, Well #12 needs to be produced at capacity.

Well #174, located on the west side of the waterflood project, was completed on May 15, 1972. It potentialed for 4 barrels of oil and 82 barrels of water per day. To eliminate paper work and separate reporting, it is requested that this well be placed in the project area by administrative action.

Should the Commission conclude that these wells cannot be placed in the project area administratively, please set this matter for hearing before an Examiner at the earliest possible Examiner Hearing.

If a hearing is necessary, it is further requested that Well #12 be granted a temporary capacity allowable until such time as the results of the hearing are made known.

0.50

Ira B. Stitt

Division Operations Engineer

ADBond/eg Attachments

cc: NMOCC - Dist. 1, Hobbs, w/attach. Commissioner of Public Lands w/attach. Offset Operators - See attached list

PRODUCTION TESTS MOBIL OIL CORPORATION'S BRIDGES STATE LEASE, WELL #12 VACUUM (GRAYBURG-SAN ANDRES) POOL LEA COUNTY, NEW MEXICO

	BBLS.	
TEST DATES	<u>0i1</u>	Water
June, 1969	26	0
Jan., 1970	24	3
Feb., 1970	22	11
Mar., 1970	19	3
June, 1970	25	0
Oct., 1970	16	2
Dec., 1970	22	3
May, 1971	16	6
Oct. 6, 1971	37	2
Oct. 24, 1971	50	1
Nov., 1971	45	1
Jan. 3, 1972	7 0	1
Jan. 28, 1972	76	3
Feb., 1972	56	4
Mar., 1972	48	0
Apr., 1972	57	0
May, 1972	67	1
June, 1972	85	1

OFFSET OPERATORS BRIDGES STATE WATERFLOOD PROJECT VACUUM (GRAYBURG-SAN ANDRES) POOL LEA COUNTY, NEW MEXICO

Atlantic Richfield Company Box 1610 Midland, Texas 79701

Aztec Gas System, Inc. 603 Wall Tower West Midland, Texas 79701

Cenard Oil & Gas Company 400 Expressway Tower Dallas, Texas 75206

Continental Oil Company Box 431 Midland, Texas 79701

Getty Oil Company Box 1231 Midland, Texas 79701

Gulf Oil Company - U.S. Box 1150 Midland, Texas 79701

Humbie Oil & Refining Company Box 1600 Midland, Texas 79701

Marathon Oil Company Box 552 Midland, Texas 79701

Pennzoil United, Inc. Box 1828 Midland, Texas 79701

The Permian Corporation 1509 West Wall Midland, Texas 79701

Phillips Petroleum Company Phillips Building 4th & Washington Odessa, Texas 79760 Shell Oil Company Box 1509 Midland, Texas 79701

Texaco Inc. Box 3109 Midland, Texas 79701

State of New Mexico





ALEX J. ARMIJO COMMISSIONER

Chee 4800

Commissioner of Public Lands

August 1, 1972

P. O. BOX 1148 SANTA FE, NEW MEXICO

Mobil Oil Corporation P. O. Box 633 Midland, Texas 79701

> Re: BRIIGES STATE WATERFLOOD PROJECT ORDER NO. R-1244. VACUUM (GRAYBURG-SAN ANDRES) POOL LEA COUNTY, NEW MEXICO

ATTENTION: Mr. Ira B. Stitt

Gentlemen:

Reference is made to your letters of July θ_* 10, and 18 of 1972, whereby you request that the following wells be included in the Bridges State Waterflood Project Area. This office has no objection to the inclusion of these wells to the Project Area. This is subject to like acceptance by the New Mexico Oil Conservation Commission.

Lessa Nama & No.	Well	Unit Letter	Section	Township	Ranne
State J (B-1519)	8	G	22	178	34E
Bridges St. (B-1520-1)	12	P	26	178	34E
Bridges St. (B-1520-1)	174	J	15	17 8	34E
State II(B-2354-2)	1	Ŷ	22	178	34E

Very truly yours

Oil and Gas Department

AJA/LUCI/s

cc:

New Mexico Oil Conservation Commission 🦟

Leases B-1519, B-1520-1, and 1-2354-2

GMH/dr



BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

8m

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

CASE NO. 4800

Order No. R- 4385

APPLICATION OF MOBEL OIL CORPORATION FOR WATERFLOOD EXPANSION AND CAPACITY ALLOWABLE, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on August 23 , 1972 at Santa Fe, New Mexico, before Examiner Richard L. Stamets

NOW, on this day of August , 1972, 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, Mobil Oil Corporation, seeks permission to expand the Bridges State Waterflood Project in the Vacuum Grayburg-San Andres Pool, Grayburg-San Andres formation, by the addition of its Bridges State Wells Nos. 12 and 174, located, respectively, in Unit P of Section 26 and Unit J of Section 15, Township 17 South, Range 34 East, NMPM, Lea County, New Mexico.

(3) That said wells are located adjacent to applicants Bridges
State Wester Flood Project in said pool but are not to directly or diagonally offset by an injection well in the project.

(4) That soid wells have experienced a response to the injection of water into the Bridges State Water Flad Project.

(5) That if said wells are not permitted to produce the tat of rates commodurate with wells in their Bridges State Water Flood Project in accordance with Commission Rule 701 E, oil may be swept past the wells emailed acrege on across lease lines.

(c) That expansion of the Bridges
State Water Flood population to said
wells No 12 and No 174 will
tend to prevent woste and
protect correlative rights.

(1) That Applicants request for a ssignment of capacity allowable

to to its Bridges State Well

No. 12 in wit P of a state;

soid Section 26 should be dismissed, as said sequent is make commenced for the state of the state of

(8) That some well No.12 has been producing with a temporary allowable in excess of the top pool allowable on and that any production in excess of the top pool string the temporary allowable private should be legal oil and should not be under up by under production.

I.T IS THERE FORE ORDERED

(1) That Mobil Oil Corporations

Bridges State Water Flood Project
is hereby expanded to include

unit Tof Section 15 and unit

Pof Section 26, both in Voweship

17 sonth, Range 34 East, NMPM,

Vacuum (Groyburg San Andres) Pool,

here County, Dew Marico.

That monthly progress reports of the expanded water-flood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(3) That any production in excess of
The top pool allowable produced by applicants
Bridges State Well No 12 in Said Section
26 under a temporary allowable is excess
of the top pool allowable shall be
legal oil provided that it was
not in excess of soid temporary
allowable.

	7. + 14.	MER C	3	
For VI	£ 433/000	10	794134	and the second of the second o
allowa b	6 2 .	pplice.	copacity	-
1/2/2		to Bridge	s state	12
is here	4	smiss . d.	orerin x	<u>6</u>

That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem nacessary.

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