

CASE 3216: Application of GULF  
OIL CORP. for a WATERFLOOD (Expansion)  
PROJECT, LEA COUNTY, NEW MEXICO.

CASE NO.

3216

Application,

Transcripts,

Small Exhibits

ETC.

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

April 5, 1965

C  
O  
P  
Y

Mr. Bill Kestler  
Gulf Oil Corporation  
Post Office Box 1938  
Roswell, New Mexico

Dear Sir:

Reference is made to Commission Order No. R-2886, recently entered in Case No. 3216, approving the expansion of Gulf's West Pearl Queen Unit Waterflood Project.

Injection into the two additional wells is to be through plastic coated tubing and packers.

According to our calculations, when all of the authorized injection wells have been placed on active injection, the maximum allowable which this project will be eligible to receive under the provisions of Rule 701-E-3 is 2478 barrels per day.

Please report any error in this calculated maximum allowable immediately, both to the Santa Fe office of the commission and the appropriate district proration office.

In order that the allowable assigned to the project may be kept current, and in order that the operator may fully benefit from the allowable provisions of Rule 701, it behooves him to promptly notify both of the aforementioned Commission offices by letter of any change in the status of wells in the project area, i.e., when active injection commences, when additional injection or producing wells are drilled, when additional wells are acquired through purchase or unitization, when wells have received a response to water

OIL CONSERVATION COMMISSION

P. O. BOX 2088

SANTA FE, NEW MEXICO

Page -2-  
Mr. Bill Kastler  
Gulf Oil Corporation  
Post Office Box 1938  
Roswell, New Mexico

injection, etc.

C  
Your cooperation in keeping the commission so informed as to the status of the project and the wells therein will be appreciated.

Very truly yours,

O  
A. L. PORTER, Jr.  
Secretary-Director

P  
ALP/DSE/ir

cc: Mr. Frank Irby  
State Engineer Office  
Santa Fe, New Mexico

Y  
Oil Conservation Commission  
Hobbs, New Mexico

GOVERNOR  
JACK M. CAMPBELL  
CHAIRMAN

State of New Mexico  
**Oil Conservation Commission**



LAND COMMISSIONER  
GUYTON B. HAYS  
MEMBER

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

P. O. BOX 2088  
SANTA FE

March 25, 1965

Mr. Bill Kastler  
Gulf Oil Corporation  
Post Office Box 1938  
Roswell, New Mexico

3216  
Re: Case No. R-2886  
Order No. \_\_\_\_\_  
Applicant: \_\_\_\_\_  
GULF Oil Corporation

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.*  
A. L. PORTER, Jr.  
Secretary-Director

ir/

Carbon 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. 3216  
Order No. R-2886

APPLICATION OF GULF OIL CORPORATION  
FOR EXPANSION OF A WATERFLOOD PROJECT,  
LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on March 10, 1965, at Santa Fe, New Mexico, before Examiner Elvis A. Utz.

NOW, on this 25th day of March, 1965, 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, Gulf Oil Corporation, seeks permission to expand its West Pearl Queen Unit Waterflood Project in the Pearl-Queen Pool in the West Pearl Queen Unit Area by the injection of water into the Queen formation through two injection wells in Section 28, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(4) That the proposed expansion of the waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

-2-

CASE No. 3216

Order No. R-2886

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

**IT IS THEREFORE ORDERED:**

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to expand its West Pearl Queen Unit Waterflood Project in the Pearl-Queen Pool in the West Pearl Queen Unit Area by the injection of water into the Queen formation through the following-described two wells in Section 28, Township 19 South, Range 35 East, NMPM, Lea County, New Mexico:

Jake L. Hamon State Well No. 28-4, located in  
Unit D

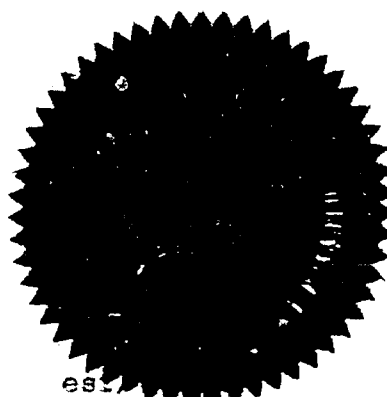
Jake L. Hamon State Well No. 28-6, located in  
Unit F

(2) That the expanded waterflood project shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

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

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

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



STATE OF NEW MEXICO  
OIL CONSERVATION COMMISSION

*Jack M. Campbell*  
JACK M. CAMPBELL, Chairman

GEORGE B. HAYS, Member

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

Case 3216

Heard 3-10-65

Rec. 3-10-65.

1. ~~Be.~~ Grant Gulf an expansion of their West Pearl Queen Waterflood by approving the use of ~~with~~ the following wells for water injection:

Jake S. Hammond - lt # 28-4-0 - 28-195-35E.

- - - - - # 28-6-F. - - - -

2. Orizond flood was created by.  
R-2729.

Thos A. H. F.



Docket No. 7-65

DOCKET: EXAMINER HEARING - WEDNESDAY - MARCH 10, 1965

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 2764: (Reopened and continued from the February 10, 1965 Examiner Hearing)  
In the matter of Case No. 2764 being reopened pursuant to the provisions of Order No. R-2439, which order established temporary 640-acre spacing units for the West Jal-Strawn Gas Pool, Lea County, New Mexico, for a period of two years. All interested parties may appear and show cause why said pool should not be developed on 320-acre spacing units.

CASE 3203: (Continued from the February 10, 1965 Examiner Hearing)  
Application of Schermerhorn Oil Corporation for a non-standard location and a non-standard gas proration unit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of an 80-acre non-standard gas proration unit comprising the N/2 NE/4 of Section 5, Township 19 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to its Liram G Well No. 1 at a non-standard location 1025 feet from the North line and 1953 feet from the East line of said Section 5.

CASE 3214: Application of Carter Foundation Production Company for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Teague-Simpson Pool by the injection of water into the Simpson formation through two injection wells located in Units B and G of Section 34, Township 23 South, Range 37 East, Lea County, New Mexico.

CASE 3215: Application of Gulf Oil Corporation for a unit agreement, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks approval of the Mescal Wash Unit Area comprising 21,446 acres, more or less, of Federal, State and Fee lands in Townships 25 and 26 South, Ranges 22 and 23 East, Eddy County, New Mexico.

CASE 3216: Application of Gulf Oil Corporation for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval of the expansion of its West Pearl Queen Unit Waterflood Project, Pearl Queen Pool, Lea County, New Mexico, to include the NW/4 of Section 28, Township 19 South, Range 35 East; applicant further seeks authority to convert two additional wells to water injection, said wells being located in Units D and E of said Section 28.

CASE 3217: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit S. S. Sutton, dba Eddy Oil Company and all other interested parties to show cause why the Eddy Oil Company Standind-State Wells Nos. 1 and 2, located in Units G and J, respectively, of Section 36, Township 19 South, Range 30 East, Eddy County, New Mexico, should not be plugged in accordance with a Commission approved plugging program.

- 2 -

MARCH 10, 1965 EXAMINER HEARING

CASE 3218: Application of Newmont Oil Company for a non-standard location, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to drill its Fidel Well No. 5 as a water injection well to inject water into the Lower Grayburg and Upper San Andres formations in its East Square Lake Waterflood Project, at a non-standard location 50 feet from the North line and 50 feet from the East line of Section 29, Township 16 South, Range 31 East, Eddy County, New Mexico.

CASE 3219: (Continued to the March 24, 1965 Examiner Hearing)  
Application of Humble Oil & Refining Company for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its State "M" lease waterflood project by the conversion to water injection of 13 additional wells located in Sections 19, 20, 29, 30 and 31, Township 22 South, Range 37 East, Langlie-Mattix Pool, Lea County, New Mexico.

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. 3066  
Order No. R-2729

APPLICATION OF GULF OIL CORPORATION  
FOR A WATERFLOOD PROJECT, LEA COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on June 10, 1964, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 18th day of June, 1964, 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 West Pearl Queen Unit Agreement has been approved by the Commission by Order No. R-2728; that the West Pearl Queen Unit Area comprises 2520 acres, more or less, of State, Fee, and Federal lands in Township 19 South, Range 35 East, NMPM, Lea County, New Mexico, as more fully described in said order.

(3) That of said 2520 acres, 160 acres being the NW/4 of Section 28, Township 19 South, Range 35 East, NMPM, has not been and evidently will not be committed to said unit agreement.

(4) That the applicant, Gulf Oil Corporation, seeks permission to institute a waterflood project in the Pearl-Queen Pool in the West Pearl Queen Unit Area by the injection of water into the

-2-

CASE No. 3066

Order No. R-2729

Queen formation through 28 wells located within that portion of the unit area which has been or will be committed to the unit agreement.

(5) That the wells in the project area are in an advanced state of depletion and should properly be classified as "stripper" wells.

(6) That the proposed waterflood project is in the interest of conservation and should result in recovery of otherwise unrecoverable oil, thereby preventing waste.

(7) That the subject application should be approved and the project should be governed by the provisions of Rule 701 of the Commission Rules and Regulations.

(8) That Jake L. Hamon, owner of the NW/4 of Section 28, Township 19 South, Range 35 East, NMPM, should be permitted to convert any wells on said acreage only after notice and hearing.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to institute a waterflood project in the Pearl-Queen Pool in the West Pearl Queen Unit Area by the injection of water into the Queen formation through the following-described 28 wells in Township 19 South, Range 35 East, NMPM, Lea County, New Mexico:

WELL

UNIT

Section 28

Cabot Carbon State "G" Well No. 5	J
Cabot Carbon State "G" Well No. 1	L
Cabot Carbon State "G" Well No. 4	N
Cabot Carbon State "G" Well No. 7	P

Section 29

Curtis R. Inman Superior Federal	
Well No. 2	B
Shell State "PK" Well No. 2	D
Cactus Parks Well No. 1	F
Skelly Hobbs-State "J" Well No. 1	H
Gulf Lea-State "IH" Well No. 1	J

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CASE No. 3066

Order No. R-2729

Gulf Lea-State "IH" Well No. 4	L
Cactus Gulf-State "A" Well No. 4	N
Cactus Gulf-State "A" Well No. 2	P

Section 30

Gulf Lea-State "AP" Well No. 3	H
Gulf Lea-State "AP" Well No. 1	P

Section 31

Cactus Aztec-State Well No. 2	B
Cactus Actec-State Well No. 6	F
Cactus Aztec-State Well No. 4	H
Cactus Aztec-State Well No. 7	J

Section 32

Gulf Lea-State "AQ" Well No. 2	B
Gulf Lea-State "AQ" Well No. 4	D
Cactus Lea-State "AQ" Well No. 5	F
Cactus Lea-State "AQ" Well No. 7	H
Phillips New Mex "C" Well No. 1	J

Section 33

Gulf Lea-State "BG" Well No. 3	B
Gulf Lea-State "BG" Well No. 1	D
Gulf Lea-State "BG" Well No. 6	F
Gulf Lea-State "BG" Well No. 8	H
Gulf Lea-State "AR" Well No. 4	J

(2) That the subject waterflood project shall be governed by the provisions of Rule 701 of the Commission Rules and Regulations, including the allowable provisions thereof, and including the provisions with respect to expansion of the waterflood project.

(3) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1119 of the Commission Rules and Regulations.

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CASE No. 3066  
Order No. R-2729

(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

JACK M. CAMPBELL, Chairman

E. S. WALKER, Member

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

S E A L

esr/

# Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

February 19, 1965

P. O. Drawer 1938  
Roswell, New Mexico 88201

W. B. Hopkins  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for  
Expansion of the West Pearl Queen Waterflood  
Project, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests that an Examiner Hearing be scheduled to consider the expansion of the West Pearl Queen Waterflood Project, Lea County, New Mexico.

In support of this application, the following facts are submitted:

- (1) The West Pearl Queen Waterflood Project was approved by the Commission by Order R-2729 in Case No. 3066 dated June 18, 1964.
- (2) Applicant requests approval to expand this project to include the NW<sup>1</sup>/<sub>4</sub> of Section 28, Township 19 South, Range 35 East, Lea County, New Mexico, as outlined in red on the attached plat.
- (3) Applicant requests approval to inject water into two wells as shown on the attached plat colored in red and described as follows:
  - (a) Well 28-4, Unit D, Section 28.
  - (b) Well 28-6, Unit F, Section 28.
- (4) Applicant proposes to use the same plan for equipping these injection wells as previously approved for the West Pearl Queen Waterflood Project.
- (5) The West Pearl Queen Unit, including the NW<sup>1</sup>/<sub>4</sub> of Section 28, has previously been approved by the Oil Conservation Commission, Land Commissioner, and the United States Geological Survey.

Respectfully submitted,

GULF OIL CORPORATION

M. I. Taylor

Enclosure  
JHH:bc

cc. Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501  
  
State Engineer's Office  
State of New Mexico  
Capitol Building  
Santa Fe, New Mexico 87501

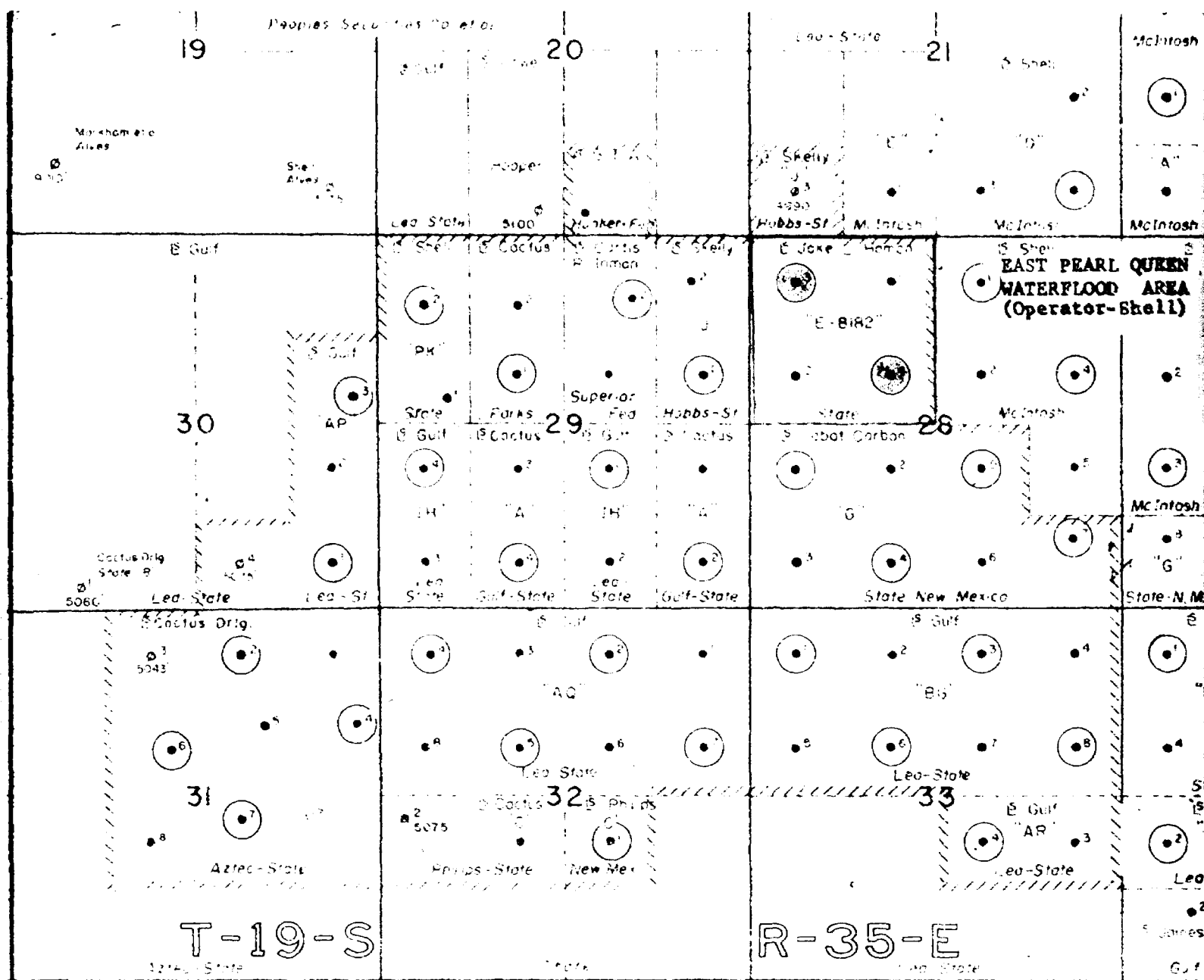
United States Geological Survey  
Post Office Box 1857  
Roswell, New Mexico 88201

New Mexico Oil Conservation Commission  
Post Office Box 1980  
Gobbs, New Mexico 88240

DOCKET MAILED



Date 2-26-65



WEST PEARL QUEEN UNIT  
PEARL QUEEN POOL  
Lea County, New Mexico

- LEGEND -

- Unit Boundary
- Injection Well
- Producing Well

GULF OIL CORP. ROSWELL DISTRICT





STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS  
STATE ENGINEER

February 23, 1965

ADDRESS CORRESPONDENCE TO:  
STATE CAPITOL  
SANTA FE, N. M.

*Case 3216*

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Gulf Oil Corporation for expansion of their West Pearl Queen Waterflood Project submitted February 19, 1965. Mr. R. Fulker of Roswell called me concerning this application and I have discussed it with your Chief Engineer, Mr. Nutter.

This office offers no objection to the granting of the application so long as the conditions of approval contained in Order R-2729 and in your letter of transmittal dated June 19, 1964 are contained in the approval of this expansion.

Yours truly,

S. E. Reynolds  
State Engineer

By: *Frank E. Inby*  
Frank E. Inby  
Chief  
Water Rights Div.

FET/ma  
cc-Gulf Oil Corp.  
F. H. Hennighausen

# Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

W. B. Hopkins  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

February 19, 1965

P.O. Drawer 1938  
Roswell, New Mexico 88201

Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for  
Expansion of the West Pearl Queen Waterflood  
Project, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests that an Examiner Hearing be scheduled to consider the expansion of the West Pearl Queen Waterflood Project, Lea County, New Mexico.

In support of this application, the following facts are submitted:

- (1) The West Pearl Queen Waterflood Project was approved by the Commission by Order R-2729 in Case No. 3066 dated June 18, 1964.
- (2) Applicant requests approval to expand this project to include the NW/4 of Section 28, Township 19 South, Range 35 East, Lea County, New Mexico, as outlined in red on the attached plat.
- (3) Applicant requests approval to inject water into two wells as shown on the attached plat colored in red and described as follows:
  - (a) Well 28-4, Unit D, Section 28.
  - (b) Well 28-6, Unit F, Section 28.
- (4) Applicant proposes to use the same plan for equipping these injection wells as previously approved for the West Pearl Queen Waterflood Project.
- (5) The West Pearl Queen Unit, including the NW/4 of Section 28, has previously been approved by the Oil Conservation Commission, Land Commissioner, and the United States Geological Survey.

Respectfully Submitted

GULF OIL CORPORATION

M. I. Taylor

Enclosure  
JHH:bc

cc: Commissioner of Public Lands  
State of New Mexico  
Post Office Box 1148  
Santa Fe, New Mexico 87501  
  
State Engineer's Office  
State of New Mexico  
Capitol Building  
Santa Fe, New Mexico 87501

United States Geological Survey  
Post Office Box 185  
Roswell, New Mexico 88201

New Mexico Oil Conservation Commission  
Post Office Box 1980  
Albuquerque, New Mexico 88240





# Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

February 23, 1965

W. B. Hopkins  
DISTRICT MANAGER

M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER

F. O. Mortlock  
DISTRICT EXPLORATION  
MANAGER

H. A. Rankin  
DISTRICT SERVICES MANAGER

P. O. Drawer 1938  
Roswell, New Mexico

*Jan 32/6*

State Engineer's Office  
Capitol Building  
Santa Fe, New Mexico 87501

Attention: Mr. Frank E. Irby  
Chief, Water Rights Division

Gentlemen:

Attached is a copy of Gulf's application for expansion of the West Pearl Queen Waterflood Project, Lea County, New Mexico. The 160-acre expansion area was originally intended to be in the project area and the exhibits and testimony for the hearing reflect this. Item No. 4 of this application states our intention to equip and inject water into Wells 28-4 and 28-6 in the manner previously approved for the West Pearl Queen Waterflood Project, Order R-2729, Case No. 3066.

In further support of this application, we are enclosing the following data which were pertinent to Case No. 3066 and also have a bearing on the current application:

- (1) Diagrammatic sketch of a typical dual injection well, West Pearl Queen Unit.
- (2) Injection well detail, West Pearl Queen Unit, including the Hamon wells. (Two sections)
- (3) Letter dated June 11, 1964, to the Oil Conservation Commission stating Gulf's intent to dually inject through two strings of tubing.

We understand that our hearing before the Oil Conservation Commission on the expansion of the West Pearl Queen Waterflood Project has been scheduled for March 10. The information included in this letter will be included in testimony for the record at that time.



State Engineer's Office

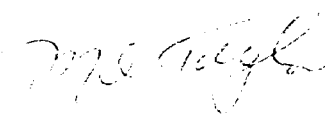
- 2 -

February 23, 1965

Since you have previously approved this program for the West Pearl Quam Waterflood Project, we hope it is also acceptable for the four-wall expansion area. Should you have any objections, please notify us as soon as possible.

Yours very truly,

GULF OIL CORPORATION

  
M. I. Taylor

Attachments  
DUB:ers

cc: Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

New Mexico Oil Conservation Commission  
Post Office Box 1980  
Hobbs, New Mexico 88240

United States Geological Survey  
Post Office Box 1857  
Roswell, New Mexico 88201

Commissioner of Public Lands  
State of New Mexico  
Santa Fe, New Mexico 87501

# Gulf Oil Corporation

ROSWELL PRODUCTION DISTRICT

February 19, 1965

P. O. Drawer 1938  
Roswell, New Mexico 88201

W. B. Hopkins  
DISTRICT MANAGER  
M. I. Taylor  
DISTRICT PRODUCTION  
MANAGER  
F. O. Mortlock  
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MANAGER  
H. A. Rankin  
DISTRICT SERVICES MANAGER

Oil Conservation Commission  
State of New Mexico  
Post Office Box 2088  
Santa Fe, New Mexico 87501

Re: Application of Gulf Oil Corporation for  
Expansion of the West Pearl Queen Waterflood  
Project, Lea County, New Mexico

Gentlemen:

Gulf Oil Corporation respectfully requests that an Examiner Hearing be scheduled to consider the expansion of the West Pearl Queen Waterflood Project, Lea County, New Mexico.

In support of this application, the following facts are submitted:

- (1) The West Pearl Queen Waterflood Project was approved by the Commission by Order R-2729 in Case No. 3066 dated June 18, 1964.
- (2) Applicant requests approval to expand this project to include the NW/4 of Section 28, Township 19 South, Range 35 East, Lea County, New Mexico, as outlined in red on the attached plat.
- (3) Applicant requests approval to inject water into two wells as shown on the attached plat colored in red and described as follows:
  - (a) Well 28-4, Unit D, Section 28.
  - (b) Well 28-6, Unit F, Section 28.
- (4) Applicant proposes to use the same plan for equipping these injection wells as previously approved for the West Pearl Queen Waterflood Project.
- (5) The West Pearl Queen Unit, including the NW/4 of Section 28, has previously been approved by the Oil Conservation Commission, Land Commissioner, and the United States Geological Survey.

Respectfully submitted,

GULF OIL CORPORATION

M. I. Taylor

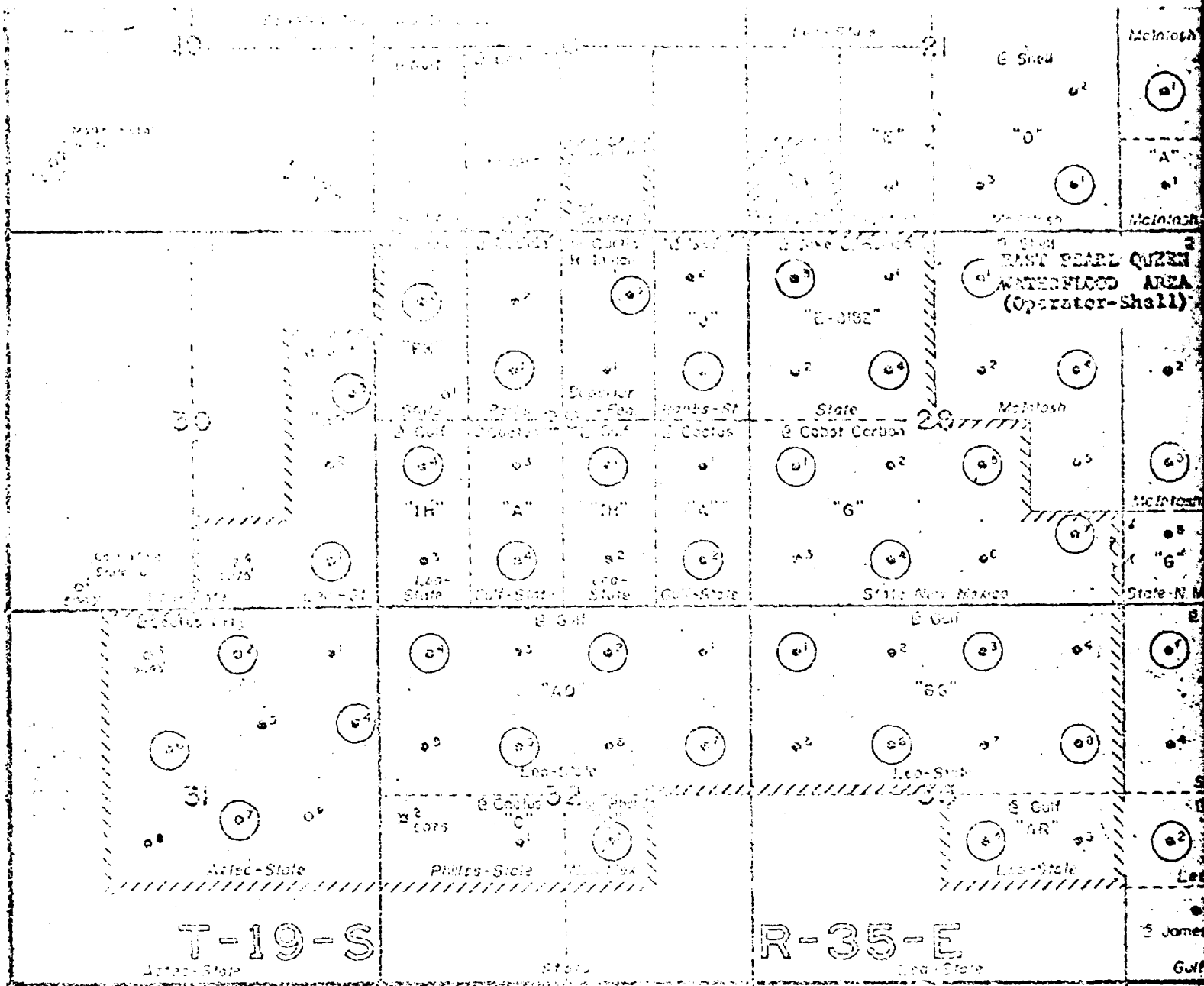
Enclosure  
JHH:bc

cc: Commissioner of Public Lands  
State of New Mexico,  
Post Office Box 1148  
Santa Fe, New Mexico 87501  
  
State Engineer's Office  
State of New Mexico  
Capitol Building  
Santa Fe, New Mexico 87501

United States Geological Survey  
Post Office Box 1857  
Roswell, New Mexico 88201

New Mexico Oil Conservation Commission  
Post Office Box 1980  
Hobbs, New Mexico 88240





THIS MAP WAS MADE BY THE  
 UNITED STATES GEOLOGICAL SURVEY  
 WASHINGTON, D. C. 20540

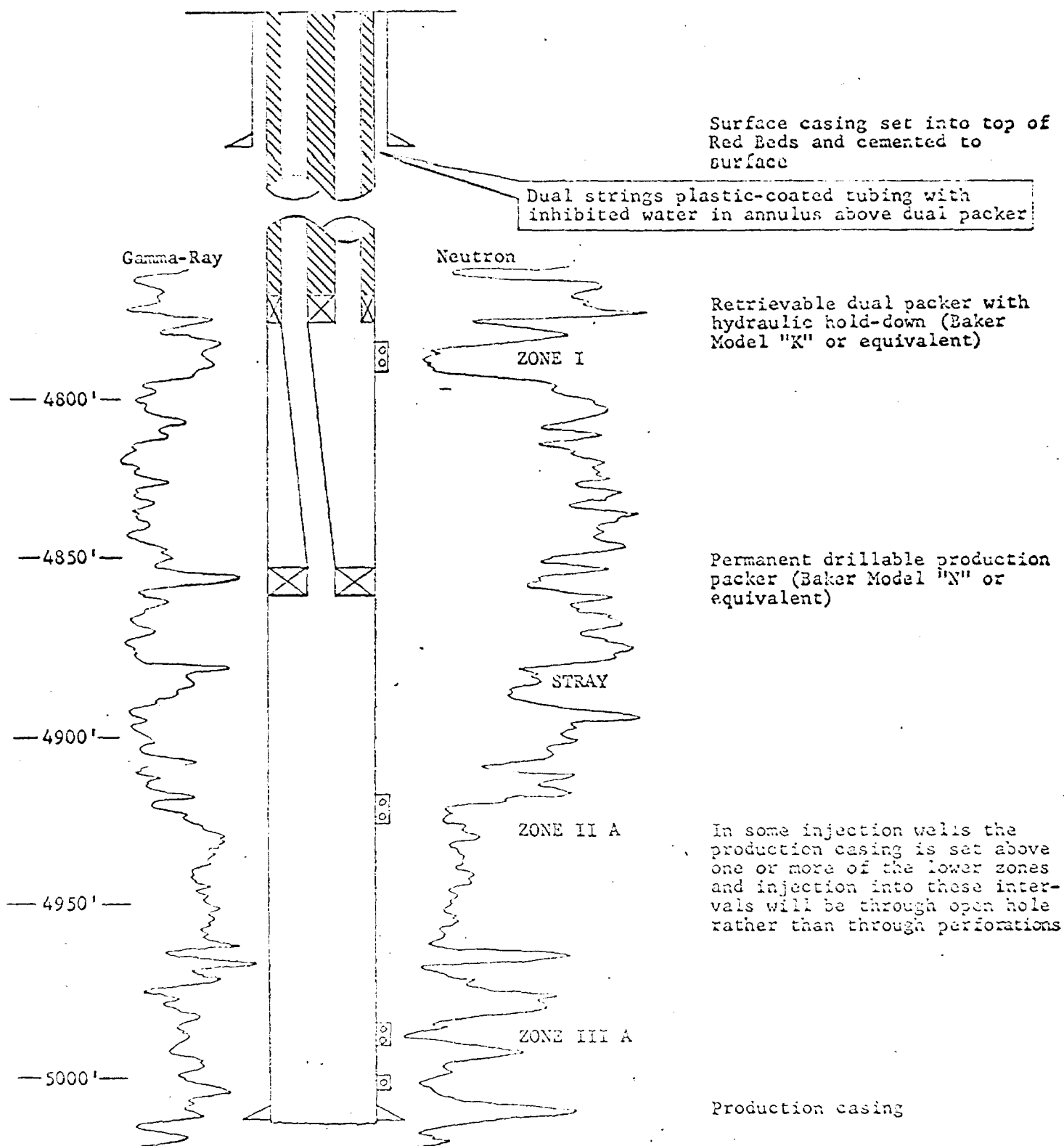
- LEGEND -

- ////// Well boundary
- Injection Well
- Producing Well

GREEN OIL CORP., HOLDING DISTRICT

DIAGRAMMATIC SKETCH  
TYPICAL DUAL INJECTION WELL

West Pearl Queen Unit  
Lea County, New Mexico





INJECTION WELL DETAIL  
TWO TUBING STRINGS IN ALL DUAL WELLS  
WEST PEARL QUEEN UNIT  
LEA COUNTY, NEW MEXICO

SECTION I  
CASING AND CEMENT

INJECTION WELL		UNIT DESIG- NATION	SURFACE CASING				PRODUCTION CASING				ADDITIONAL CEMENTED INTERVALS #
			SIZE (INCHES)	DEPTH (FEET)	CEMENT (SACKS)	TOP CEMENT (FEET)	SIZE (INCHES)	DEPTH (FEET)	CEMENT (SACKS)	TOP CEMENT (FEET) *	
HAMON ST. E-8182	NO. 3	28- 4	8-5/8	327	300	Surface	4-1/2	4991	350	3423	E
	NO. 4	28- 6	8-5/8	326	300	Surface	4-1/2	4961	350	3393	E
CABOT ST. NEW MEX. "G"	NO. 5	28-10	8-5/8	304	300	Surface	5-1/2	4931	200	3753	E
	NO. 1	28-12	8-5/8	312	300	Surface	5-1/2	4904	300	3180	E
	NO. 4	28-14	8-5/8	302	300	Surface	5-1/2	4919	200	3920	E
	NO. 7	28-16	8-5/8	305	300	Surface	4-1/2	4932	200	4036	E
INMAN SUPERIOR-FED.	NO. 2	29- 2	8-5/8	328	265	Surface	4-1/2	5049	240	2980	E
SHELL ST. "PK"	NO. 2	29- 4	8-5/8	96	85	Surface	5-1/2	5145	200	3967	E
CACTUS PARKS	NO. 1	29- 6	13-3/8	100	80	Surface	7	4932	150	3061	E
SKELLY HOBBS "J" ST.	NO. 1	29- 8	13-3/8	88	80	Surface	5-1/4	4920	300	3153	E
GULF LEA ST. "IH"	NO. 1	29-10	8-5/8	308	300	Surface	4-1/2	5009	2050	795	S
	NO. 4	29-12	8-5/8	144	100	Surface	4-1/2	4974	250	4078	E 1914-1864
CACTUS GULF ST.	NO. 4	29-14	13-3/8	100	50	Surface	5-1/2	4965	350	3026	E
	NO. 2	29-16	13-3/8	90	80	Surface	5-1/2	4939	300	3277	E
GULF LEA ST. "AP"	NO. 3	30- 8	8-5/8	143	100	Surface	4-1/2	5075	250	3597	E 1875-1825
	NO. 1	30-16	8-5/8	137	100	Surface	4-1/2	4981	250	4085	E 1924-1874
CACTUS AZTEC ST.	NO. 2	31- 2	13-3/8	107	100	Surface	7	4832	125	3273	E
	NO. 6	31- 6	13-3/8	108	90	Surface	7	4714	150	2843	E
	NO. 4	31- 8	13-3/8	102	100	Surface	7	4874	150	3003	E
	NO. 7	31-10	13-3/8	105	100	Surface	7	4714	150	3300	E
							5-1/2 Liner	4984	40	4144	E
GULF LEA ST. "AQ"	NO. 2	32- 2	8-5/8	108	60	Surface	4-1/2	4959	250	4063	E 1895-1845
	NO. 4	32- 4	8-5/8	101	100	Surface	4-1/2	4948	250	4052	E 1935-1885
	NO. 5	32- 6	8-5/8	130	100	Surface	4-1/2	4936	250	4040	E 1920-1870
	NO. 7	32- 8	8-5/8	145	100	Surface	4-1/2	4979	250	4081	E 1909-1859
PHILLIPS NEW MEX. "C"	NO. 1	32-10	8-5/8	144	145	Surface	5-1/2	5060	300	3293	E
GULF LEA ST. "BG"	NO. 3	33- 2	8-5/8	327	300	Surface	4-1/2	4932	1850	465	S
	NO. 1	33- 4	8-5/8	349	300	Surface	4-1/2	4969	1800	415	S
	NO. 6	33- 6	8-5/8	146	100	Surface	4-1/2	4965	250	3487	E 1882-1833
	NO. 8	33- 8	8-5/8	141	100	Surface	4-1/2	5005	250	3527	E 1896-1846
GULF LEA ST. "AR"	NO. 4	33-10	8-5/8	140	100	Surface	4-1/2	5011	250	3533	E 1865-1815

\* E - Estimated      S - Temperature Survey

# Two-stage cementing tool set at lower depth and 50 sacks cement spotted at top of salt and anhydrite section.

INJECTION WELL DETAIL  
TWO TUBING STRINGS IN ALL DUAL WELLS  
WEST PEARL QUEEN UNIT  
LEA COUNTY, NEW MEXICO

SECTION II  
TUBING, PACKERS AND PERFORATIONS

INJECTION WELL		UNIT DESIG- NATION	UPPER INJECTION INTERVAL						LOWER INJECTION INTERVAL					
			GROSS PERF. AND/OR OPEN HOLE INTERVALS	TUBING		PACKER		DEPTH	GROSS PERF. AND/OR OPEN HOLE INTERVALS	TUBING		PACKER		DEPTH
				SIZE (OD)	DEPTH	TYPE	DEPTH			SIZE (OD)	DEPTH	TYPE	DEPTH	
HAMON ST. E-8182	NO. 3	28- 4	4762-4772	1.660	4700	RD W/HH	4700	4700	4880-4910	1.660	4850	Permanent	4850	
	NO. 4	28- 6	4700-4710	1.660	4650	RD W/HH	4650	4650	4814-4895	1.660	4750	Permanent	4750	
CABOT ST. NEW MEX. "G"	NO. 5	28-10	4710-4720	2.063	4650	RD W/HH	4650	4650	4826-4910	2.063	4775	Permanent	4775	
	NO. 1	28-12	4733-4747	2.063	4700	RD W/HH	4700	4700	4850-4946	2.063	4800	Permanent	4800	
	NO. 4	28-14	4774-4786	2.063	4725	RD W/HH	4725	4725	4854-4949	2.063	4825	Permanent	4825	
	NO. 7	28-16	4726-4735	1.660	4675	RD W/HH	4675	4675	4842-4851	1.660	4800	Permanent	4800	
INMAN SUPERIOR-FED.	NO. 2	29- 2	4814-4820	1.660	4775	RD W/HH	4775	4775	4934-5008	1.660	4900	Permanent	4900	
SHELL STATE "PK"	NO. 2	29- 4	4870-4880	2.063	4825	RD W/HH	4825	4825	5026-5054	2.063	4950	Permanent	4950	
CACTUS PARKS	NO. 1	29- 6	4810-4820	2.375	4750	RD W/HH	4750	4750	4932-5030	2.375	4875	Permanent	4875	
SKELLY HOBBS "J" ST.	NO. 1	29- 8	4770-4785	2.063	4725	RD W/HH	4725	4725	4898-5000	2.063	4850	Permanent	4850	
GULF LEA STATE "IH"	NO. 1	29-10	4782-4790	1.660	4750	RD W/HH	4750	4750	4914-5000	1.660	4850	Permanent	4850	
	NO. 4	29-12	4819-4821	1.660	4775	RD W/HH	4775	4775	4957-5050	1.660	4900	Permanent	4900	
CACTUS GULF ST. "A"	NO. 4	29-14	4775-4790	2.063	4725	RD W/HH	4725	4725	4910-4993	2.063	4850	Permanent	4850	
	NO. 2	29-16	4746-4761	2.063	4700	RD W/HH	4700	4700	4888-4962	2.063	4825	Permanent	4825	
GULF LEA STATE "AP"	NO. 3	30- 8	4848-4850	1.660	4800	RD W/HH	4800	4800	4927-5037	1.660	4900	Permanent	4900	
	NO. 1	30-16	4803-4805	1.660	4750	RD W/HH	4750	4750	4947-5060	1.660	4900	Permanent	4900	
CACTUS AZTEC ST.	NO. 2	31- 2	4790-4800	2.375	4750	RD W/HH	4750	4750	4835-5030	2.375	4825	Permanent	4825	
	NO. 6	31- 6	4714-4900	2.375	4700	RS Tension	4700	4700	Commingled Injection w/Upper Interval in Open Hole.					
	NO. 4	31- 8	4784-4790	2.375	4750	RD W/HH	4750	4750	4877-4930	2.375	4825	Permanent	4825	
	NO. 7	31-10	4767-4772	2.375	4700	RD W/HH	4700	4700	4880-4997	2.375	4825	Permanent	4825	
GULF LEA-STATE "AQ"	NO. 2	32- 2	4774-4776	1.660	4725	RD W/HH	4725	4725	4924-5015	1.660	4850	Permanent	4850	
	NO. 4	32- 4	4785-4787	1.660	4725	RD W/HH	4725	4725	4929-5020	1.660	4850	Permanent	4850	
	NO. 5	32- 6	4786-4788	1.660	4725	RD W/HH	4725	4725	4884-5025	1.660	4825	Permanent	4825	
	NO. 7	32- 8	4802-4804	1.660	4750	RD W/HH	4750	4750	4949-5040	1.660	4875	Permanent	4875	
PHILLIPS NEW MEX. "C"	NO. 1	32-10	4790-4806	2.063	4750	RD W/HH	4750	4750	4893-5022	2.063	4850	Permanent	4850	
GULF LEA ST. "BG"	NO. 3	33- 2	4737-4741	1.660	4700	RD W/HH	4700	4700	4881-4975	1.660	4800	Permanent	4800	
	NO. 1	33- 4	4773-4785	1.660	4725	RD W/HH	4725	4725	4920-5010	1.660	4850	Permanent	4850	
	NO. 6	33- 6	4767-4782	1.660	4700	RD W/HH	4700	4700	4927-5020	1.660	4850	Permanent	4850	
	NO. 8	33- 8	4750-4752	1.660	4700	RD W/HH	4700	4700	4890-4962	1.660	4800	Permanent	4800	
GULF LEA ST. "AR"	NO. 4	33-10	4776-4778	1.660	4725	RD W/HH	4725	4725	4876-4998	1.660	4825	Permanent	4825	

RD W/HH - Retrievable Dual with Hydraulic Hold-down Similar to Baker Model "K"  
RS Tension - Retrievable Single Tension Type Packer Similar to Baker Model "AB"  
Permanent - Drillable Packer Similar to Baker Model "W" (Tubing Set)

June 11, 1954

65 FEB 24 1955

Oil Conservation Commission  
Post Office Box 2880  
Santa Fe, New Mexico 87501

Attention: Mr. Roy S. Hunter,  
Chief Engineer

Re: Case No. 3066  
West Pearl Queen Unit Waterflood

Gentlemen:

In testimony before the Oil Conservation Commission at the June 10, 1954 Examiner Hearing pertaining to Case No. 3066, Gulf offered two plans for daily injecting water into the Queen reservoir underlying the West Pearl Queen Unit. These two plans were described in Exhibits 8-11, which were entered in evidence, and outlined proposals for daily injecting through either two strings of central tubing or simultaneously through one string of tubing and the tubing-casing annulus. Gulf indicated that neither plan had definitely been decided on since there were pros and cons for each which would have to be weighed and analyzed by our field personnel prior to a final decision. A decision has now been reached; Gulf plans to daily inject water into the Queen reservoir through injection wells equipped with dual strings of tubing as illustrated in Exhibit No. 8 and detailed in tabular form in Exhibit No. 9.

Yours very truly,

ORIGINAL SIGNED

BY

M. I. TAYLOR

M. I. Taylor

cc: Mr.

Mr. Frank M. Long  
Chief, Water Control Division  
State Engineer's Office  
Capital Building  
Santa Fe, New Mexico 87501

Mr. Marion H. Long  
Supervisor, Water Division  
State Bank Office  
Post Office Box 2880  
Santa Fe, New Mexico 87501

WET  
JUN

**DEARNLEY-MEIER REPORTING SERVICE, Inc.**

FARMINGTON, N. M.  
PHONE 325-1182

SANTA FE, N. M.  
PHONE 983-3971

ALBUQUERQUE, N. M.  
PHONE 243-6691

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Santa Fe, New Mexico  
March 10, 1965

EXAMINER HEARING

IN THE MATTER OF:

APPLICATION OF GULF OIL CORPORATION FOR A  
WATERFLOOD EXPANSION, LEA COUNTY, NEW  
MEXICO

Case No. 3216

BEFORE:

ELVIS A. UTZ

TRANSCRIPT OF HEARING



dearnley-meier

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

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PAGE 2

MR. UTZ: Case Number 3216.

MR. DURRETT: Application of Gulf Oil Corporation for a waterflood expansion, Lea County, New Mexico.

MR. KASTLER: Bill Kastler from Roswell, appearing on behalf of Gulf Oil Corporation. We have one witness, Mr. Don Bilbrey. We have already had these exhibits marked, 1 and 2.

At the outset, I would like to move that the testimony in consolidated Cases Number 3065 and 3066 pertaining to the West Pearl Queen Waterflood Unit be incorporated in the present case, or taken notice of.

MR. UTZ: Is there an objection concerning the motion? The record in those two cases, Number 3065 and 3066, will be made a part of this record.

\* \* \*

D O N G. B I L B R E Y, the witness, having been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. KASTLER:

Q Mr. Bilbrey, please state your full name and address, and by whom you are employed and your position.

A My full name, Don Gene Bilbrey. I reside at 1201 West McGaffey, Roswell, New Mexico. I work for Gulf Oil Corporation as a petroleum engineer in Roswell.

Q Have you previously appeared before the New Mexico

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Oil Conservation Commission and been qualified as an expert witness?

A Yes.

Q --As a production engineer?

A As a petroleum engineer.

Q Are you personally familiar with Gulf's application in this case?

A I am.

Q Will you state what Gulf is seeking in this application.

A Gulf requests approval to expand the West Pearl Queen Waterflood Project area to include the northwest quarter of Section 28, Township 19 South, Range 35 East, Lea County, New Mexico. This is the cross-hatched area shown on the plat marked Exhibit Number 1. The 160-acre four-well tract is part of the West Pearl Queen Unit but it is not now a part of the project area. We also request approval to convert two of the wells to injection service, the 28-1 in Unit D and the 28-6 in Unit F of Section 28. If expansion of the project area is approved we request that the project allowable be increased to reflect inclusion of these four wells in the waterflood.

Q How did it happen that this matter was not taken care of when Gulf obtained its original approval?

A At the time of the hearing on June 10, 1964, Mr. Jake

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L. Hamon was operator of Tract 15. In testimony before the Commission it was brought out that Mr. Hamon did not intend to commit this acreage to the unit. He had agreed, however, to cooperate with our flood as well as Shell's East Pearl Queen flood. Commission Order Number R-2728 approved the entire unit area as outlined in Exhibit 1, including Tract 15. Commission Order Number R-2729 approving the waterflood project excluded Tract 15 and specifically provided that any conversion of wells to injection status on the Hamon tract would be permitted only after notice and hearing.

Q Didn't Mr. Hamon sell his interest in Tract 15 shortly after the hearing?

A Yes. On July 6, 1964, Gulf reached an agreement with Mr. Hamon whereby we purchased all the working interest in the tract effective July 1, 1964 at 7:00 A.M. We then allowed other working interest owners to share in this purchase, and exhibits to the unit instruments were revised to reflect these changes before the instruments were submitted to the State Land Office and the U. S. Geological Survey for final approval.

Q So then it was admitted as a regular fully subscribed unit?

A Yes.

Q Including Tract 15?

A That's correct. Since all these events occurred

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prior to the effective date of unitization, we considered Tract 15 to be part of the West Pearl Queen Unit. Even though the tract was in the unit, we overlooked the fact that Order Number R-2729 specifically excluded it from the project area.

Q After unitization, Gulf erroneously assumed that Tract 15 was part of the waterflood project area?

A Yes, and I think I'm erroneously assuming it now. On August 26, 1964, we transmitted the approved Certificate of Effectiveness, the Unit and Unit Operating Agreements with the revised exhibits and recording information to the Commission, at the same time advising the Commission that 100% approval of both the working interest owners and royalty owners had been obtained. In the transmittal letter, we advised the Oil Conservation Commission that Gulf had purchased the Hamon tract. Still later, on December 7, 1964, we filed a Plan of Operation with the Commission. This outline and plat included the Hamon tract as part of the waterflood project. Along with the plan of operation, we sent a copy of the Line Well Agreement made with Shell, in which we specifically included one Tract 15 well, the 28-6, as one of the injection wells subject to the agreement. On December 16, this Plan of Development was approved. During all these happenings no one had caught our oversight that Tract 15 was still not an approved part of the waterflood project.



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Q When was this oversight finally brought to Gulf's attention?

A Shell has justifiably been anxious for us to start water injection along our east boundary since they have been under near full scale injection in their unit since October, 1964. Our injection system will not be ready until mid-April at the earliest and we made arrangements with Shell whereby they could inject water into three of our line wells until we were ready with our own system.

On February 17, 1965, we asked approval from the Hobbs District Office of the Oil Conservation Commission to convert these three wells to injection status. That office informed us they could not grant permission for conversion of one of the wells, 28-6 on Tract 15, since it was not authorized under Order Number R-2729. When we finally realized our oversight, we made application for this hearing to expand the project area to include Tract 15.

Q At long last?

A At long last.

Q Do you now intend to convert Wells 28-4 and 28-6 at the same time?

A No. As originally planned, we will convert 28-6 first so that Shell can inject into it while we are completing our waterflood installation. We will convert 28-4, however, to

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have it ready by the time we start injection through our own system in mid-April.

Q In regard to your proposed method of completion, will these two wells be completed in the same method and under the same plan as the other wells in the West Pearl Queen Project Area already approved under Order Number R-2729?

A Yes, they will be the same.

Q Has the State Engineer's Office been consulted in regard to your plans to convert these two wells?

A Yes, they have. On February 23, 1965, Gulf wrote a letter to that office, attention Mr. Irby, in which we outlined our plan of injection on Tract 15, which is to be the same as already approved for the project. On that same date we received a copy of a letter from Mr. Irby to Mr. Porter of the New Mexico Oil Conservation Commission offering no objection to the granting of our application as long as the plan of injection is the same as that for the West Pearl Queen Waterflood Project. A photocopy of this letter is marked Exhibit 2.

Q Does Gulf request that the maximum allowable for the waterflood project be increased by the four wells shown in the proposed expansion area on Exhibit Number 1, which consists of the northwest quarter of Section 28, Township 19 South, Range 35 East, containing 160 acres, more or less?

A Yes, we would like to have an additional allowable.

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PAGE 8

Q Do you have anything further to add?

A No.

Q If this application were granted would it, in your opinion, be in the interest of the prevention of waste?

A Yes, we believe that additional oil will be recovered through secondary operations being extended to these lands.

Q Was the plat showing proposed expansion in the area in the West Pearl Queen Unit prepared under your supervision or at your direction?

A Yes.

Q Is Exhibit Number 2 a true photocopy of the letter received from Mr. Irby of the State Engineer's Office concerning this application?

A Yes.

MR. KASTLER: This concludes my questions. I would like to move that Exhibits Number 1 and 2 be admitted in evidence.

MR. UTZ: Without objection, Exhibits 1 and 2 will be admitted in the record of this case.

#### CROSS-EXAMINATION

MR. UTZ: Did you submit any sketches as to the casing?

A Today?

Q On the Number 28-4 and the 28-6.

dearnley-meier

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A On the individual wells themselves, that was all included in the original testimony for the West Pearl Queen Project--we sent copies of logs and such, and what you are looking at there is part of that, that we sent to you and Mr. Irby, to show how we plan to complete these injection wells.

Q Is that casing program on these two wells the same as that on the other injection wells in the unit?

A Yes, sir, to the best of my knowledge.

MR. UTZ: Are there other questions of the witness? The witness may be excused. Are there other statements in this case? The case will be taken under advisement.

\* \* \*

STATE OF NEW MEXICO )  
 ) ss  
COUNTY OF BERNALILLO )

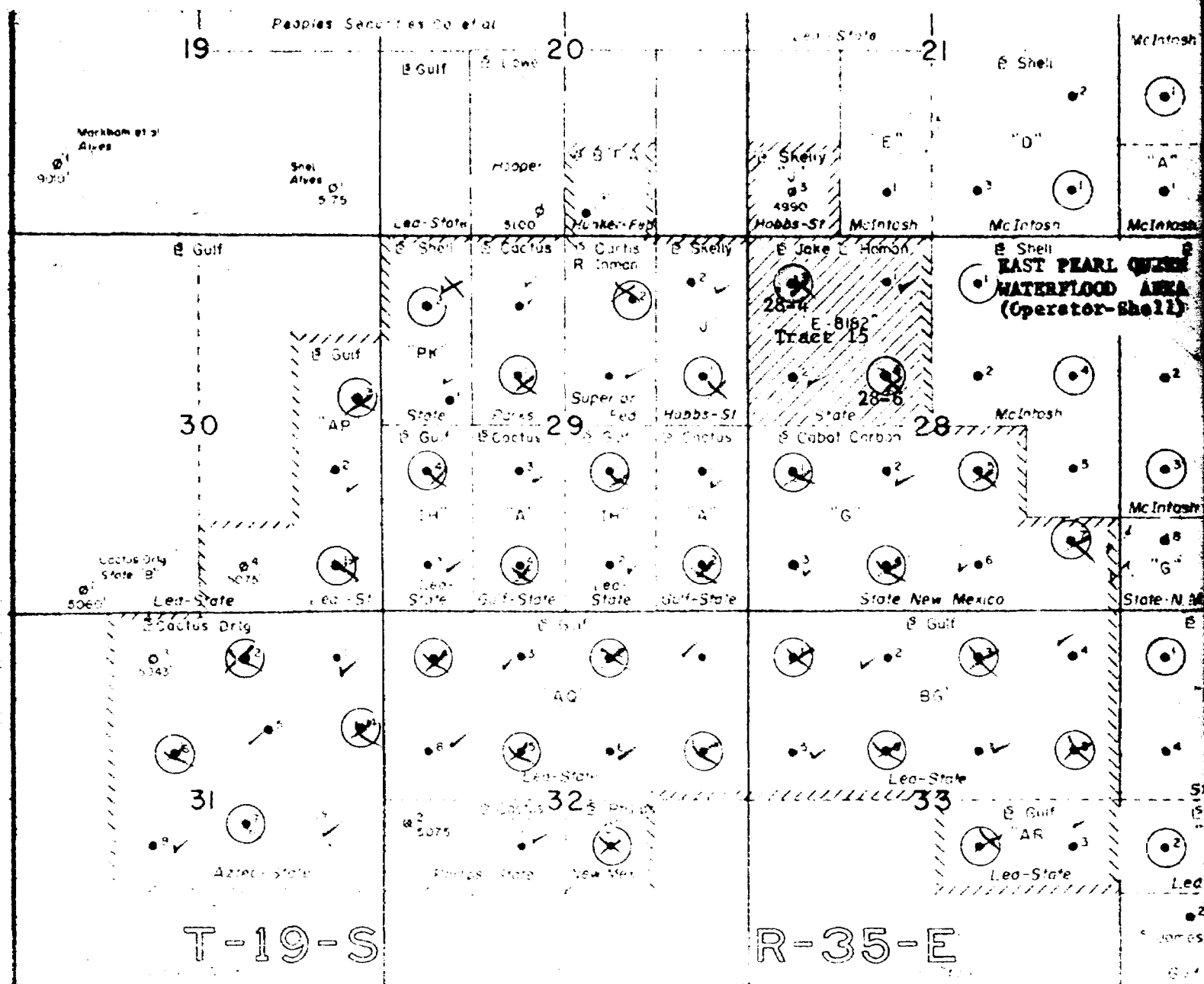
I, ELIZABETH K. HALE, Notary Public and Court Reporter, do hereby certify that the proceedings in the foregoing case were taken and transcribed by me, and that the foregoing is a true and accurate transcript of proceedings to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF, my hand and seal of office this 29th day of March, 1965.

*Elizabeth K. Hale*  
Notary Public

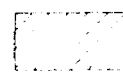



My commission expires  
May 23, 1968.

I do hereby certify that the foregoing is a complete record of the proceedings in the Union Hearing of Case 3216, heard by *Mar 10* 1965.  
*James O. [Signature]*, Examiner  
New Mexico Oil Conservation Commission



WEST PEARL QUEEN UNIT  
PEARL QUEEN POOL  
Lea County, New Mexico

- LEGEND -

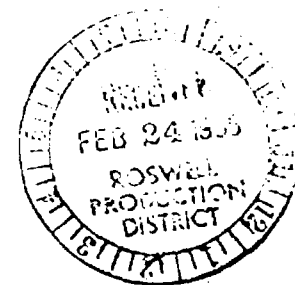
-  Expansion Area  
West Pearl Queen  
Waterflood Project
-  Unit Boundary
-  Injection Well
-  Producing Well

GULF OIL CORP. ROSWELL DISTRICT

CASE NO. 3216  
EXHIBIT NO. 1

*file*

February 23, 1965



816

817

Mr. A. L. Porter, Jr.  
Secretary-Director  
Oil Conservation Commission  
Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Gulf Oil Corporation for expansion of their West Pearl Queen Waterflood Project submitted February 19, 1965. Mr. R. Fulker of Roswell called me concerning this application and I have discussed it with your Chief Engineer, Mr. Nutter.

This office offers no objection to the granting of the application so long as the conditions of approval contained in Order R-2729 and in your letter of transmittal dated June 19, 1964 are contained in the approval of this expansion.

Yours truly,

S. E. Reynolds  
State Engineer

By:  
Frank E. Irby  
Chief  
Water Rights Div.

FEI/ma  
cc-Gulf Oil Corp.  
P. H. Hennighausen

CASE NO. 3216  
EXHIBIT NO. 2

**GEOPHYSICAL REPORT  
NEW MEXICO**

**WEEK ENDING:** February 18, 1965

**PAGE** #1

PROV.	COMPANY	COUNTY	LOCATION	CONTR. CO.	TYPE	CREW	WORKING UNDER	STATION
-------	---------	--------	----------	------------	------	------	---------------	---------

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*Gulf	Chaves & Eddy		T-20-S, R-20 & 21-E	Geo. Prospectors	Refl.	Smith		Jal
*Humble	Chaves & Lea		T-9-S, R-25 & 26-E; T-12-S, R-31 & 32-E	Co. Owned	Refl.	Henkhaus		Hobbs
Atlantic	Eddy		T-18-S, R-31-E	Co. Owned	Refl.	Talclet		Artesia
Mobil	Eddy		Sec. 19-23S-27E	R. H. Ray	Geograph	Noel		Carlsbad
*Pure	Eddy		T-24-S, R-28-E	Petty	Refl.	Davis		Eunice
Cities Service	Eddy & Lea		T-21-S, R-31-E; T-22-S, R-32-E	Co. Owned	Refl.	Bush		Lovington
*Shell	Eddy & Lea		T-18-S, R-27, 28, 34 & 35-E; T-19-S, R-28-E	Co. Owned	Refl.	Woodruff		Hobbs
Sinclair	Lea		T-9-S, R-37-E	Rogers	Refl. (Dinoseis)	Cooper		Tatum
Sunray	Lea		T-9-S, R-32-E	S.E.C.	Refl.	Searless		Tatum
Texaco	Lea		T-20-S, R-33-E	Geo. Service	Refl.	Ivorak		Carlsbad
Texaco	Dona Ana & Sierra		T-17 & 18-S, R-2 & 3-W; T-16 & 17-S, R-5 & 6-W	Co. Owned	Gravity	Edmndson		Deming

\*Denotes a new prospect

at 1000 ft. 8131

mostly ...

2.1.11

plate ...

Expansion of flood inclusion  
of 160 acres NW/4 28

19-35

Construction of 2 wells

28-6 SE NW

28-4 NW NW

