

CASE 6039: GULF OIL CORPORATION FOR
DIRECTIONAL DRILLING, LEA COUNTY,
NEW MEXICO

Case Number

6039

Application

Transcripts.

Small Exhibits

ETC.

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
28 September 1977

EXAMINER HEARING

IN THE MATTER OF:

Application of Gulf Oil Corporation
for directional drilling, Lea County,
New Mexico.

CASE
6039

BEFORE: Daniel S. Nutter

TRANSCRIPT OF HEARING

A P P E A R A N C E S

For the New Mexico Oil
Conservation Commission:

Lynn Teschendorf, Esq.
Legal Counsel for the Commission
State Land Office Building
Santa Fe, New Mexico

For the Applicant:

Jeffrey G. Shrader, Esq.
Gulf Oil Corporation
P. O. Box 1150
Midland, Texas 79702

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I N D E X

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The Witness, Charles F. Kalteyer

Direct Examination by Mr. Shrader 3

Cross Examination by Mr. Nutter 9

E X H I B I T S

Applicant Exhibit 1, Plat 9

Applicant Exhibit 2, Order 9

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1 MR. NUTTER: The hearing will please come to order.
2 We'll call Case 6039.

3 MS. TESCHENDORF: Case 6039. Application of Gulf
4 Oil Corporation for directional drilling, Lea County, New
5 Mexico.

6 MR. SHRADER: Mr. Examiner, my name is Jeffrey
7 Shrader. I'm an attorney for Gulf Oil located in Midland,
8 Texas. I have one witness to be sworn.

9 (Witness sworn.)

10 MR. SHRADER: Mr. Examiner, Mr. James Sperling of
11 Albuquerque has entered an appearance by a letter in this
12 case.

13 MR. NUTTER: We have your appearance.

14
15 CHARLES F. KALTEYER
16 being called as a witness and being duly sworn upon his oath,
17 testified as follows, to-wit:

18
19 DIRECT EXAMINATION

20 BY MR. SHRADER:

21 Q Will you state your name for the record, please?

22 A I'm Charles F. Kalteyer, employed by Gulf Oil Cor-
23 poration in Midland, Texas, and classified as Chief Proration
24 Engineer for the southwest division.

25 Q Have you previously testified before the New Mexico

1 Oil Conservation Commission and stated your qualifications as
2 a petroleum engineer?

3 A Yes, sir.

4 MR. SHRADER: Mr. Examiner, is the witness quali-
5 fied?

6 MR. NUTTER: Yes, he is.

7 Q What is Gulf seeking in this application?

8 A Gulf is seeking authority to directionally drill
9 one oil well and two gas wells in the Central Drinkard Unit,
10 of the Drinkard Pool, Lea County, New Mexico.

11 The proposed wells are Unit Well Number 419, with
12 a surface location of 1631 feet from the south line and 260
13 feet from the west line of Section 28, Township 21 South,
14 Range 37 East. The bottom hole location will be in Unit I,
15 approximately 1335 feet from the south line and 15 feet from
16 the east line of Section 29, Township 21 South, Range 37 East.

17 MR. NUTTER: All of these wells are in 21/37, is
18 that correct?

19 A The bottom -- yes, sir.

20 MR. NUTTER: Okay.

21 A Unit Well Number 421 will be at a surface location
22 of 1465 from the north line and 1056 from the east line of
23 Section 32. Bottom hole location will be in Unit A, approxi-
24 mately 1305 feet from the north line and 1305 feet from the
25 east line of Section 32.

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1 Unit Well Number 422 with a surface location of
2 1155 feet from the north line and 1000 feet from the west
3 line of Section 33; with a bottom hole location in Unit C,
4 approximately 1305 feet from the north line and 1335 feet
5 from the west line of Section 33.

6 Q Do you have an exhibit which shows the Central
7 Drinkard Unit and the location of the proposed wells?

8 A Yes, sir. Exhibit 1 is a plat of the Central
9 Drinkard Unit project, which is outlined by hauchers which
10 depicts the location of injection wells, producing wells,
11 and those wells that are located immediately adjacent to the
12 unit. The wells enclosed in squares are Drinkard gas com-
13 pletions. The wells that are encircled are Drinkard oil
14 producers. The three wells that are enclosed in green --
15 green circles are the surface locations of the three wells
16 about which this hearing is concerned.

17 Q Will these three wells be bottomed at regular
18 locations according to statewide spacing rules?

19 A Yes, sir. We propose to complete these wells with-
20 in 100 feet of the herein proposed bottom hole locations.

21 Q Are there currently oil wells producing from each
22 of the proration units to which these wells are scheduled
23 to be drilled?

24 A No, sir, each of the 40-acre proration units to
25 which these wells are to be directionally drilled currently

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1 have only water injection wells located thereon.

2 Q What are the producing capabilities of the nearest
3 wells which offset the proposed locations?

4 A The two producers offsetting Number 419 are pro-
5 ducing -- are Wells Number 116, producing 41 oil and 4 water;
6 Number 122 in Unit P producing 24 oil and 242 water. The
7 two wells closest to proposed Well 421 are Well Number 132
8 in Unit B of Section 32, producing 9 oil and 34 water; Well
9 Number 140 in Unit H produces 30 oil and 8 water.

10 The two wells nearest to proposed Unit Well 422 are
11 Number 130 in Unit B, producing 14 oil and 103 water, and
12 Number 142 in Unit F, producing 18 oil and 96 water.

13 Q Why does Gulf believe it necessary to drill a
14 second well on each of these proration units?

15 A Well Number 419 is scheduled to be drilled as an
16 in-fill well on the edge of the original pilot injection
17 program, which was a double five-spot pattern. The pilot
18 project was initiated in September of 1967, and this well
19 is to be completed in the main Drinkard pay as an oil pro-
20 ducer to evaluate the sweep efficiency of the area. Wells
21 421 and 422 are being drilled in the interior part of the
22 Central Drinkard Unit as Drinkard Gas development wells.

23 Q Is it necessary for the protection of correlative
24 rights that these three wells which are the subject of this
25 hearing be drilled?

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1 A. Yes, sir, these are necessary to protect correla-
2 tive rights of the Central Drinkard Unit owners. The oper-
3 ators believe that the gas can be developed without a detri-
4 mental effect on the waterflood project and in order to pro-
5 tect our investments in the waterflood and minimize secondary
6 oil recovery, which is our primary concern, we have decided
7 to use separate wellbores to develop the Drinkard gaz zone.

8 Q Should that be maximize secondary oil recovery?

9 A. Yes, sir.

10 Q Why is it necessary to directionally drill these
11 wells?

12 A. All three wells will be drilled through the Drinkard
13 oil zone and it is quite possible that this reservoir will
14 require 20-acre density drilling for maximum hydrocarbon
15 recovery. These bottom hole locations were chosen in order
16 to have these wellbores available to maximize the sweep ef-
17 ficiency of the flood. The various surface obstructions
18 that prevent our locating these wells at the most desirable
19 located, such as ranch house and corrals, county road, and
20 gas and oil transmission lines and tank battery equipment.
21 We propose to kick the bottom hole locations of each of these
22 wells from around 300 to 400 feet.

23 Q What is the normal cost to drill and complete oil
24 and gas wells in the Drinkard Pool as compared to direction-
25 ally drilling the subject wells?

1 A. A Drinkard gas completion costs in the neighborhood
2 of \$230,000 and an oil completion is around \$270,000. The
3 estimated cost to drill the gas wells, directionally drill the
4 gas wells is \$260,000 and the oil well at \$300,000. These
5 costs are up about \$40,000 from our request last year when
6 we drilled three wells in Section 33.

7 Q. What did the Oil Conservation Commission authorize
8 in Case Number 5474 under Order Number R-5030?

9 A. The Commission authorized approval of such addi-
10 tional producing wells and injection wells at orthodox or
11 unorthodox locations within the boundaries of the Central
12 Drinkard Unit area as may be necessary to complete an effi-
13 cient production and injection pattern and to protect the
14 unit from drainage providing said wells are drilled no closer
15 than 330 feet to the outer boundary of the unit area nor
16 closer than 10 feet to any quarter-quarter section or sub-
17 division inner boundary, and provided further, that no 40-
18 acre tract shall be permitted to produce more gas than the
19 amount obtained by multiplying the top unit allowable for
20 the Drinkard Pool by the limiting gas/oil ratio for the
21 pool.

22 Q. Will these three proposed wells be in compliance
23 with this Order Number R-5030?

24 A. Yes, sir, they will.

25 Q. Do you have a copy of that order for the conven-

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1 ience of the Examiner?

2 A. Yes, sir. it is included --

3 Q. Is it labeled as Gulf's Exhibit 2 in this case?

4 A. Yes, sir, it is.

5 Q. Will you again summarize what the operators of the
 6 Central Drinkard Unit are seeking in this application?

7 A. As stated initially, we are seeking authority to
 8 directionally drill Well Number 419 as an oil completion, and
 9 Wells 421 and 422 as Drinkard Gas completions.

10 Q. Was Exhibit Number 1 prepared by you or under your
 11 supervision?

12 A. Yes, sir, it was.

13 MR. SHRADER: Mr. Examiner, I have no further ques-
 14 tions of this witness at this time. I would move that Gulf's
 15 Exhibit Number 1 and 2 be admitted into evidence in this
 16 case.

17 MR. NUTTER: Gulf Exhibits 1 and 2 will be admitted.

18

19 CROSS EXAMINATION

20 BY MR. NUTTER:

21 Q. Mr. Kalteyer, now Well Number 419 will be bottomed
 22 in Unit I of Section 29.

23 A. Yes, sir.

24 Q. There is no Drinkard producing well on that 40-acre
 25 tract, is that correct?

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1 A That is correct.

2 Q So it would have a full allowable for itself, a
 3 full oil and casinghead gas.

4 A Yes, sir.

5 Q Well Number 421 will be bottomed in Unit A of Sec-
 6 tion 32. Is there any producing well in the Drinkard on that
 7 40-acre tract?

8 A No, sir.

9 Q You have the Number 131 and that is an injection
 10 well?

11 A Yes, sir, that's correct.

12 Q So that will have a full casinghead gas allowable
 13 assignable to it.

14 A Yes, sir, if it's capable.

15 Q Well Number 422 will be located in Unit C of Sec-
 16 tion 33, and the only Blinebry well in that 40-acre tract is
 17 the Number 129, I presume, and it is also an injection well?

18 A Yes, sir, that's correct.

19 Q So that well would have a full allowable assignable
 20 to it.

21 A Yes, sir.

22 Q Now, you stated, I believe, that the horizontal
 23 displacement on each of these would be some 300 to 400 feet,
 24 is that correct?

25 A Yes, sir.

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1 Q What will your kick-off point be? Approximately?

2 A Let me see if I have that information here in my
 3 file. It would be below 2600 feet where our 3-5/8ths is set.
 4 I do not have the exact proposed depth on each of those wells
 5 with me, but I'll be glad to supply that.

6 Q And what would be the approximate vertical depth?

7 A 6700 feet.

8 Q Now, the reason for the drilling, though, the di-
 9 rectional drilling, is because there are surface obstructions
 10 at each proposed drill site?

11 A Yes, sir.

12 Q Correct, where you would prefer to bottom the well?

13 A Yes, sir. We are trying to get the most efficient
 14 locations for sweep efficiency of the flood.

15 Q Now, I notice on your Exhibit 1 here we do have a
 16 line coming up through Sections 28 and 33 indicated to be the
 17 city limits of Eunice, I believe it is.

18 A Yes, sir.

19 Q Which side of that line is the town on, the west
 20 or the east side?

21 A It would be on the right side there.

22 Q So you're just to the west of the town?

23 A Yes, sir, we're outside the city limits.

24 Q Okay. Now, you had a hearing some time back in
 25 which you got authority for some directional drilling in the

1 town of Eunice, is that correct?

2 A Yes, sir, that was last year, those three wells in
3 Section 33.

4 Q What order number was it that authorized those wells
5 Mr. Kalteyer?

6 A That was Case Number 5741, Order Number R-5263.

7 Q Thank you. And the directional drilling will be
8 conducted in such a manner that you will bottom the hole
9 within 100 feet of these indicated bottom hole locations,
10 correct?

11 A Yes, sir.

12 MR. NUTTER: Are there any further questions of
13 Mr. Kalteyer? He may be excused.

14 Do you have anything further in this case?

15 MR. SHRADER: No, sir, Mr. Examiner.

16 MR. NUTTER: We'll take the case under advisement.

17 (Hearing concluded.)
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REPORTER'S CERTIFICATE

I, SALLY WALTON BOYD, a Certified Shorthand Reporter,
DO HEREBY CERTIFY that the foregoing and attached Transcript
of Hearing before the New Mexico Oil Conservation Commission
was reported by me, and the same is a true and correct record
of the said proceedings to the best of my knowledge, skill,
and ability.

Sally Walton Boyd
Sally Walton Boyd, C. S. R.

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I do hereby certify that the foregoing is
a correct and true copy of the proceedings in
the case of 6039
the 9/28 of 1977
new Mexico oil conservation commission

Examiner
New Mexico Oil Conservation Commission

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

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

CASE NO. 6039
Order No. R-5548

APPLICATION OF GULF OIL CORPORATION
FOR DIRECTIONAL DRILLING, LEA COUNTY,
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on September 28, 1977, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 25th day of October, 1977, 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 authority for the directional drilling of three wells on its Central Drinkard Unit, Drinkard Pool, Lea County, New Mexico, all in Township 21 South, Range 37 East, as follows:

Well No. 419, surface location 1631 feet from the South line and 260 feet from the West line of Section 28, bottom-hole location within 100 feet of a point 1335 feet from the South line and 15 feet from the East line of Section 29;

Well No. 421, surface location 1465 feet from the North line and 1056 feet from the East line of Section 32, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1305 feet from the East line of said Section 32, and;

Well No. 422, surface location 1155 feet from the North line and 1000 feet from the West line of Section 33, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1335 feet from the West line of said Section 33.

Case No. 6039
Order No. R-5548

(3) That the applicant seeks authority to directional drill said wells to permit the surface locations to be more distant from occupied dwellings on the outskirts of the town of Eunice.

(4) That approval of the application is in the interest of conservation, inasmuch as it will minimize surface damage and fire hazard, and will not cause waste, and will not impair correlative rights, provided that the applicant should be required to determine the subsurface locations of the bottom of the holes by means of a continuous multi-shot directional survey conducted subsequent to directional drilling, if said wells are to be completed as producing wells.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to directionally drill three wells on its Central Drinkard Unit, Drinkard Pool, Lea County, New Mexico, all in Township 21 South, Range 37 East, as follows:

Well No. 419, surface location 1631 feet from the South line and 260 feet from the West line of Section 28, bottom-hole location within 100 feet of a point 1335 feet from the South line and 15 feet from the East line of Section 29;

Well No. 421, surface location 1465 feet from the North line and 1056 feet from the East line of Section 32, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1305 feet from the East line of said Section 32; and

Well No. 422, surface location 1155 feet from the North line and 1000 feet from the West line of Section 33, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1335 feet from the West line of said Section 33.

PROVIDED HOWEVER, that subsequent to the above-described directional drilling, should said wells be producers, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the whipstock point with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs district office of the date and time said surveys are to be commenced.

(2) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.

-3-

Case No. 6039
Order No. R-5548

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

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION



Phil R. Lucero

PHIL R. LUCERO, Chairman

EMERY C. ARNOLD, Member

Joe D. Ramey
JOE D. RAMEY, Member & Secretary

S E A L

jr/

BEFORE THE OIL CONSERVATION COMMISSION
OF THE STATE OF NEW MEXICO

EXHIBIT 2
CASE NO. 6039
September 28, 1977

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

CASE NO. 5474
Order No. R-5030

APPLICATION OF GULF OIL COMPANY
FOR TWO NON-STANDARD LOCATIONS
AND THE AMENDMENT OF ORDERS
NOS. R-2904 AND R-2909, LEA
COUNTY, NEW MEXICO.

BEFORE EXAMINER NUTTER	
EXAMINER NO.	2
CASE NO.	6039

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 14, 1975, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 22nd day of May, 1975, 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 Gulf Oil Company is the operator of the Central Drinkard Unit, Drinkard Pool, Lea County, New Mexico, which unit is governed by the Central Drinkard Unit Agreement which was approved by the Commission by Order No. R-2904, dated May 6, 1965.

(3) That pursuant to Commission Order No. R-2909, dated May 16, 1965, and certain other orders, the applicant is conducting secondary recovery operations within said Central Drinkard Unit Area.

(4) That the unitized interval for said Central Drinkard Unit Area was defined in the original Central Drinkard Unit Agreement as being from 6440 feet to 6590 feet as found on the log of the Gulf Oil Corporation J. N. Carson Well No. 7, located 810 feet from the North line and 2180 feet from the East line of Section 33, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(5) That the applicant seeks the amendment of the Central Drinkard Unit Agreement to change the unitized interval for said Central Drinkard Unit Area to be from 6330 feet to 6590 feet as found on the log of the aforesaid J. N. Carson Well No. 7.

(6) That the applicant further seeks approval for the unorthodox location of two wells in the Drinkard Pool underlying said Central Drinkard Unit, said wells being Unit Well No. 101 located 554 feet from the North line and 766 feet from the East line, and Unit Well No. 401 located 660 feet from the North line and 660 feet from the East line, both in Section 28, Township 21 South, Range 37 East, NMPM.

(7) That the applicant further seeks the amendment of Order No. R-2909, which authorized the secondary recovery project in said Central Drinkard Unit Area, to provide for the administrative approval of additional wells at unorthodox locations in said unit area.

(8) That the necessity for the amendment of the unitized interval of the Central Drinkard Unit, the location of the two wells described in Finding No. (6) above, and the establishment of the administrative procedure described in Finding No. (7) above is occasioned by development of the Upper Drinkard gas pay in wells offsetting the Central Drinkard Unit Area.

(9) That to protect the said unit area from drainage by offsetting wells, the applicant, as unit operator, must complete gas wells in the Upper Drinkard gas pay on the same 40-acre tract as existing wells in the Lower Drinkard oil pay which are part of the Lower Drinkard Waterflood Project.

(10) That approval of the amendment of the vertical limits of the unitized interval of the Central Drinkard Unit, the two above-described non-standard locations, and the aforesaid administrative procedure is in the interest of the protection of correlative rights and the prevention of waste, and should be approved, provided that the gas production from any 40-acre tract should be limited to top unit allowable for the Drinkard Pool times the limiting gas-oil ratio for the pool.

IT IS THEREFORE ORDERED:

(1) That the vertical limits of the unitized interval of the Central Drinkard Unit Area are hereby amended to be from 6330 feet to 6590 feet as found on the log of the Gulf Oil Corporation J. N. Carson Well No. 7, located 810 feet from the North line and 2180 feet from the East line of Section 33, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico, subject to like approval by the Commissioner of Public Lands for the State of New Mexico.

(2) That the applicant, Gulf Oil Company, is hereby authorized to complete the following wells in the Drinkard Pool at the following non-standard locations in Section 28, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico:

Central Drinkard Unit Well No. 101, located 554 feet from the North line and 766 feet from the East line; and

Central Drinkard Unit Well No. 401, located 660 feet from the North line and 660 feet from the East line.

PROVIDED HOWEVER, that the 40-acre tract upon which said wells are located shall have a limited casinghead gas allowable determined by multiplying top unit allowable for the Drinkard Pool by the gas-oil ratio limitation for said pool.

(3) That Order (1) of Commission Order No. R-2909, is hereby amended by the addition of the following:

"PROVIDED HOWEVER, that the Secretary-Director of the Commission is hereby authorized to approve such additional producing wells and injection wells at orthodox and unorthodox locations within the boundaries of the Central Drinkard Unit Area as may be necessary to complete an efficient production and injection pattern, and to protect the unit from drainage, provided said wells are drilled no closer than 330 feet to the outer boundary of the unit area nor closer than 10 feet to any quarter-quarter section or subdivision inner boundary, and provided further, that no 40-acre tract shall be permitted to produce more gas than the amount obtained by multiplying top unit allowable for the Drinkard Pool by the limiting gas-oil ratio for the pool. To obtain such administrative approval, the unit operator shall file proper application with the Commission, which application, if it seeks to convert additional wells to injection or to drill additional production or injection wells, shall include the following:

(1) A plat showing the location of the proposed well, all wells within the project area, and offset operators, and locating wells which offset the project area.

(2) A schematic drawing of the proposed injection well which fully describes the casing, tubing, perforated interval, and depth.

(3) A letter stating that all offset operators to the proposed well have been furnished a complete copy of the application and the date of notification.


The Secretary-Director may approve the proposed well if, within 20 days after receiving the application, no objection to the proposal is received. The Secretary-Director may grant immediate approval, provided waivers of objection are received from all offset operators."


(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


I. R. TRUJILLO, Chairman


PHIL R. LUCERO, Member


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

S E A L

jr/

- CASE 6038: Application of W. Ridley Wheeler Estate for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in an undesignated San Andres reservoir by the injection of water into the San Andres formation thru the open-hole interval from 4800 feet to 4870 feet in its Markham Well No. 2, to be drilled 1980 feet from the South line and 25 feet from the East line of Section 28, Township 9 South, Range 35 East, Lea County, New Mexico.
- CASE 6039: Application of Gulf Oil Corporation for directional drilling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the directional drilling of three Drinkard Pool wells on its Central Drinkard Unit in Township 21 South, Range 37 East, Lea County, New Mexico, as follows:
- Well No. 419, surface location 1631 feet from the South line and 260 feet from the West line of Section 28, to be bottomed approximately 1335 feet from South line and 15 feet from East line of Section 29; Well No. 421, surface location 1465 feet from North line and 1056 feet from East line of Section 32, to be bottomed approximately 1305 feet from North and East lines of Section 32; and Well No. 422, surface location 1155 feet from North line and 1000 feet from West line of Section 33, to be bottomed approximately 1305 feet from North line and 1335 feet from West line of Section 33.
- CASE 6040: Application of Gulf Oil Corporation for pool reclassification and a special COR limit, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of the North Teague-Devonian Gas Pool in Sections 22 and 27, Township 23 South, Range 37 East, Lea County, New Mexico, as an oil pool and the consolidation of said pool with the Teague-Devonian Oil Pool in Sections 27, 34, and 35 of said Township. Applicant further requests a special gas-oil ratio limit for said Teague-Devonian Oil Pool of not more than 5000 to one.
- CASE 6041: Application of Gulf Oil Corporation for an unorthodox location and simultaneous dedication, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for the unorthodox location of its Harry Leonard Well No. 12 located in Unit P of Section 22, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to a previously approved 480-acre multiple well non-standard proration unit.
- CASE 6042: Application of Gulf Oil Corporation for a non-standard proration unit, simultaneous dedication, and unorthodox locations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks approval for a 388.51-acre non-standard gas proration unit comprising the NW/4 and E/2 SW/4 of Section 6, and the NW/4 of Section 7, both in Township 22 South, Range 37 East, Eumont Gas Pool, Lea County, New Mexico, to be simultaneously dedicated to applicant's H. T. Mattern Wells Nos. 6 and 3, at unorthodox locations in Unit N of Section 6 and Unit F of Section 7, respectively.
- VASE 6043: Application of V-F Petroleum Inc., for an unorthodox oil well location, Roosevelt County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox oil well location 330 feet from the South line and 2310 feet from the East line of Section 29, Township 8 South, Range 38 East, North Sawyer-Devonian Pool, Roosevelt County, New Mexico.
- CASE 6044: Application of Orla Petco for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests down to 3500 feet underlying the NE/4 NE/4 of Section 1, Township 23 South, Range 27 East, and also the NW/4 NE/4 of said Section, Eddy County, New Mexico, to form two 40-acre units, each to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said wells and the allocation of the costs thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the wells and a charge for risk involved in drilling said wells.
- CASE 6045: Application of Burleson & Huff for compulsory pooling, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests underlying the NW/4 of Section 12, Township 21 South, Range 36 East, Eumont Gas Pool, Lea County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.
- CASE 6046: Application of Belco Petroleum Corporation for compulsory pooling, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an order pooling all mineral interests in the Morrow formation underlying all of Section 3, Township 22 South, Range 25 East, Catclaw Draw-Morrow Gas Pool, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location thereon. Also to be considered will be the cost of drilling and completing said well and the allocation of the cost thereof, as well as actual operating costs and charges for supervision. Also to be considered will be the designation of applicant as operator of the well and a charge for risk involved in drilling said well.

J. R. MODRALL
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LAW OFFICES OF
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PUBLIC SERVICE BUILDING

P. O. BOX 2168

ALBUQUERQUE, NEW MEXICO 87103

September 21, 1977

SEP 22 1977
JOHN C. SPERLING 11886-1854
AUGUST 1977
TELEPHONE 243-4511
AREA CODE 505

Mr. Joe D. Ramey
Secretary-Director
Oil Conservation Commission
P. O. Box 2088
Santa Fe, New Mexico 87501

Re: Applications of Gulf Oil Corporation -
Docket No. 30-77, Case Nos. 6039, 6040,
6041 and 6042

Dear Mr. Ramey:

Enclosed, please find Entry of Appearance on behalf of
Gulf Oil Corporation in cases numbered 6039, 6040, 6041
and 6042, which have been docketed for the Examiner's
Hearing on September 28, 1977.

Very truly yours,

James E. Sperling
James E. Sperling

/jev
Enclosures

cc: Mr. Morgan L. Copeland, w/encl.
Mr. Jeffrey G. Shrader, w/encl.

SEP 22 1977

BEFORE THE OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION
OF GULF OIL CORPORATION TO
DIRECTIONALLY DRILL THREE
CENTRAL DRINKARD UNIT WELLS,
DRINKARD POOL, LEA COUNTY, NEW
MEXICO

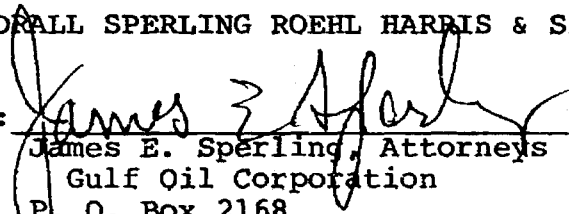
Case No. 6039

ENTRY OF APPEARANCE

The undersigned, Modrall, Sperling, Roehl, Harris & Sisk,
of Albuquerque, New Mexico, hereby enter their appearance for
the applicant, Gulf Oil Corporation, with its house counsel
of Midland, Texas.

MODRALL SPERLING ROEHL HARRIS & SISK

By:


James E. Sperling, Attorneys for
Gulf Oil Corporation
P. O. Box 2168
Albuquerque, New Mexico 87103
Telephone: (505) 243-4511

Case
6039

SEP -6 1977

Gulf Energy and Minerals Company - U.S.

SOUTHWEST DIVISION

J. L. Huitt
VICE PRESIDENT
C. E. Fields
CONTROLLER
R. E. Galvin
GENERAL MANAGER PRODUCTION
J. A. Hord
GENERAL MANAGER EXPLORATION

P. O. Drawer 1150
Midland, TX 79702

September 2, 1977

New Mexico Oil Conservation Commission (3)
Post Office Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. Joe D. Ramey

RE: Application to Directionally Drill
Three (3) Central Drinkard Unit
Wells, Drinkard Pool, Lea County,
New Mexico.

Gentlemen:

Gulf Oil Corporation respectfully requests that a hearing be scheduled on your September 28, 1977 Examiners Docket to consider an application to directionally drill three wells in the Central Drinkard Unit, Drinkard Pool, Lea County, New Mexico. The proposed wells are to be located as follows:

<u>UNIT WELL NO.</u>	<u>LOCATION</u>
419	Surface: 1631' FSL & 260' FWL, Section 28, T-21-S, R-37-E. Bottom Hole: Unit I approximately 1335' FSL & 15' FEL, Section 29, T-21-S, R-37-E.
421	Surface: 1465' FNL & 1056' FEL, Section 32, T-21-S, R-37-E. Bottom Hole: Unit A approximately 1305' FNL & 1305' FEL, Section 32, T-21-S, R-37-E.



A DIVISION OF GULF OIL CORPORATION

RAILROAD COMMISSION OF TEXAS
September 2, 1977
Page 2.

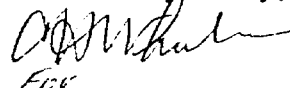
UNIT WELL NO.	LOCATION
422	<p>Surface: 1155' FNL & 1000' FWL, Section 33, T-21-S, R-37-E.</p> <p>Bottom Hole: Unit C approximately 1305' FNL & 1335' FWL. Section 33, T-21-S, R-37-E.</p>

Under Order No. R-5030 the Commission amended Order No. R-2909 to provide for the authorization of "such additional producing wells and injection wells at orthodox or unorthodox locations within the boundaries of the Central Drinkard Unit area as may be necessary to complete an efficient production and injection pattern, and to protect the unit from drainage, provided said wells are drilled no closer than 330' to the outer boundary of the unit area nor closer than 10' to any quarter-quarter section or subdivision inner boundary, and provided further, that no 40-acre tract shall be permitted to produce more gas than the amount obtained by multiplying the top unit allowable for the Drinkard Pool by the limiting gas-oil ratio for the pool".

Well No. 419 is to be completed in the Drinkard oil zone to evaluate the infill potential of the original pilot area. Well Nos. 421 and 422 are to be completed in the Drinkard Gas zone to protect correlative rights. Each of the proposed Wells is to be bottomed on the same 40-acre tract on which a currently completed Drinkard oil zone injection well is located. The positioning of these well bores is necessary to insure their future usefulness in the waterflood program for maximum oil recovery.

The proposed wells will be located outside the city limits of Eunice, New Mexico and will require directional drilling due to surface obstructions.

Yours very truly,



J. M. THACKER
Manager - Operations

CFK:sdn
cc: J. T. Sexton
Post Office Box 1980
Hobbs, New Mexico 88240

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. 6039
Order No. R-5548

APPLICATION OF GULF OIL CORPORATION FOR
DIRECTIONAL DRILLING, LEA COUNTY, NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on ~~September~~ ^{October} 28, 1977,
at Santa Fe, New Mexico, before Examiner David S. Miller.

NOW, on this ____ day of ~~September~~ ^{October}, 1977, 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 authority
for the directional drilling of three wells on its Central
Drinkard Unit, Drinkard Pool, Lea County, New Mexico, all in
Township 21 South, Range 37 East, with ~~40-acre~~
production units to be dedicated as follows:

Well No. 419, surface location 1631 feet from the South
line and 260 feet from the ~~West~~ line, bottom-hole
location within 100 feet of a point 1335 feet from the
South line and 15 feet from the East line, Unit F dedication;
^{of Section 28,}

Well No. 421, surface location 1465 feet from the North
line and 1056 feet from the East line, bottom-hole
location within 100 feet of a point 1305 feet from the
North line and 1305 feet from the East line, Unit A
dedication and;
^{of Section 32, of said Section 32,}

Well No. 422, surface location 1155 feet from the North
line and 1000 feet from the ~~West~~ line, bottom-hole
location within 100 feet of a point 1305 feet from the
North line and 1335 feet from the ~~West~~ line, Unit C
dedication.
^{of Section 33, of said Section 33,}

(3) That the applicant seeks authority to directional drill said wells to permit the surface locations to be ~~outside the Eunice city limits~~ and more distant from occupied dwellings ~~on the outskirts of the Town of Eunice~~.

(4) That approval of the application is in the interest of conservation, inasmuch as it will minimize surface damage and fire hazard, and will not cause waste, and will not impair correlative rights, provided that the applicant should be required to determine the subsurface locations of the bottom of the holes by means of a continuous multi-shot directional survey conducted subsequent to directional drilling, if said wells are to be completed as producing wells.

IT IS THEREFORE ORDERED:

(1) That the applicant, Gulf Oil Corporation, is hereby authorized to directionally drill three wells on its Central Drinkard Unit, Drinkard Pool, Lea County, New Mexico, all in ~~Section 32~~, Township 21 South, Range 37 East, and with unit dedications as follows:

Well No. 419, surface location 1631 feet from the South line and 260 feet from the ~~West~~ line, bottom-hole location within 100 feet of a point 1335 feet from the South line and 15 feet from the East line, ^{of Section 29,} Unit I dedication;

Well No. 421, surface location 1465 feet from the North line and 1056 feet from the East line, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1305 feet from the East line, ^{of Section 32, of said Section 32,} Unit A dedication and;

Well No. 422, surface location 1155 feet from the North line and 1000 feet from the ~~West~~ line, bottom-hole location within 100 feet of a point 1305 feet from the North line and 1335 feet from the ~~West~~ line, ^{of Section 33, of said Section 33,} Unit C dedication.

PROVIDED HOWEVER, that subsequent to the above-described directional drilling, should said wells be producers, a continuous multi-shot directional survey shall be made of the wellbore from total depth to the whipstock point with shot points not more than 100 feet apart; that the operator shall cause the surveying company to forward a copy of the survey report directly to the Santa Fe office of the Commission, Box 2088, Santa Fe, New Mexico; and that the operator shall notify the Commission's Hobbs district office of the date and time said surveys are to be commenced.

(2) That Form C-105 shall be filed in accordance with Commission Rule 1108 and the operator shall indicate thereon true vertical depths in addition to measured depths.

(3) Jurisdiction

DONE at