CASE 4426: Application of TEXACO INC. FOR SALT WATER DISPOSAL, CHAVES COUNTY, NEW MEXICO.

Case Number

Application Transcripts.

Small Exhibits

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

209 SIMMS BLDG, . P.O. BOX 1092 . PHONE 243-6691 . ALBUQUERQUE, NEW MEXICO

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
October 14, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco Inc. for salt water disposal, Chaves County, New Mexico.

) Case No. 4426

BEFORE: Daniel S. Nutter, Examiner.



TRANSCRIPT OF HEARING

MR, NUTTER: Call next case, No. 4426.

MR. HATCH: Application of Texaco Inc. for salt water disposal, Chaves County, New Mexico.

Again, this case 4426 was heard on September the There were some corrections that had to be made as result of the case heard then. It was readvertised.

I would move that without objection the case be decided on the testimony that was presented on September 16th.

MR. NUTTER: Case No. 4426 is open for appearance Are there any? The case as heard on September 16th, 1970, will be taken under advisement.

STATE OF NEW MEXICO COUNTY OF BERNALILLO )

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

Dlenka Burka-Court Reporter

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10/19 . 110 New Earteo Oil Conservation Commission



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ALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONT, BAILY COPT, CC

BEFORE THE
NEW MEXICO OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
September 16, 1970

EXAMINER HEARING

IN THE MATTER OF:

Application of Texaco, Inc. for salt water disposal, Chaves County, New Mexico.

CASE 4426

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING



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MR. NUTTER: Case 4426, Application of Texaco Inc. for salt water disposal, Chaves County, New Mexico.

MR. BATEMAN: Mr. Examiner, Ken Bateman of White, Gilbert, Koch and Kelly appearing for the Applicant and I have one witness, Mr. E. D. Mc Carter. I request he be sworn at this time.

(Whereupon, the witness was sworn.)

MR. BATEMAN: Mr. Commissioner, before I get started, I have a brief statement. We have a slight difficulty with our advertisement in that we notified the total depth of the well involved as apparently 11,794 feet rather than 11,750 feet as indicated in the advertisement. I would request leave to amend our Application and would request the Commission readvertise it to indicate the proper total depth. However, I would further request that you take testimony today as we are prepared to receive and enter an Order at a later date.

MR. NUTTER: Will the disposal interval be from 11,150 to 11,794?

A That's correct.

MR. NUTTER: Mr. Bateman, proceed with your case and we will withhold Order until it has been readvertised.

### DALE McCARTER

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



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### DIRECT EXAMINATION

### BY MR. BATEMAN:

- Q State you name and position, please?
- A I am Dale McCarter with Texaco, Inc. I am Division Engineer located in Midland.
  - Q Have you testified before the Commission before?
  - A Yes, I have.
- MR. BATEMAN: Are the witness' qualifications acceptable?
  - MR. NUTTER: Yes, they are.
- Q (By Mr. Bateman) Would you state what Texaco seeks by this Application?
- A Texaco seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval, 11,150 to 11,794 feet in its Peery Federal Well No. 4 located in Unit "A" of Section 29, Township 15 South, Range 30 East, Little Lucky Lake-Devonian Pool, Chaves County, New Mexico.
- Q We have a brochure which includes these Exhibits. Would you refer to Exhibit No. 1?
- A No. 1 is a map of the area indicating the wells marked by red arrow as the well which we propose for salt water disposal, Well No. 4. It indicates that approximately nine wells have been drilled in the Little Lucky Lake-Devonian



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AS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO I NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO Area, five of them have been completed, one abandoned. There are now four producing wells.

- Q What is the present status of the well involved?
- A The well involved is currently shut-in. It was recently filled as a Devonian test. However, the Devonian was found wet and it was decided to use it as a salt-water-disposal well.
- Q You have indicated on Exhibit 1 a present saltwater-disposal well, is that correct?
- South, Range 30 East is indicated Texaco's "B" Spencer No. 1B Federal Well. It is currently used for salt water disposal in the Queen Interval, 2450 to 2782. It is currently operating at its maximum pressure injection and volume. We do have permission by Order from the Commission to deepen that well to the Devonian for salt water disposal purpose. This was granted by Order No. R-3956 as a result of Case 4344 held April 29, 1970. The well was planned to be taken to the Devonian for salt water disposal. However, we could not obtain permission from the current lease holder to do so until after a Devonian test had been drilled on their acreage. In the meantime, we commenced drilling operations on our Peery Federal Well No. 4 and subsequently obtained a dry hole and instead of going to



(25)

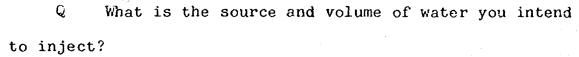
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the expense of beating in the other well we already had one.

MR. NUTTER: You were lucky it was not a dry hole.

Q (By Mr. Bateman) Mr. McCarter, would you refer to Exhibit No. 2?

Exhibit No. 2 is a diagramatic sketch of the Peery Federal Well No. 4 indicating surface casing of 113 quarterinch, set at 454 feet with cement circulated to surface, a string of 8 and 5/8 intermediate casing set at 5,000 feet cemented with 900 sacks of Trandi-Lightweight, 200 sacks of Class "C" cement, a five and one=half inch liner set from 4800 feet to 11,150 feet. The well was drilled to 11,600, subsequently it was deepened and served to additional porosity to 11,794 feet. At tieback string of five and a half was run from surface to 4800 feet. This tieback string is plastic coated. It is proposed we be allowed to inject this string down five and a half inch casing. Cement on the liner was 380 sacks of Trandi-Lightweight and 200 sacks of Class "C" which was a theoretical field to tie back into the receptacle at the top of the liner. However, it did not and the top of the liner was squeezed with 200 sacks of cement.



A The source will be the water produced from the



Devonian in the Little Lucky Lake-Devonian Pool. Texaco was the only operator in the pool. We expect a maximum of 10,000 barrels of water per day.

How much, please?

10,000. We do anticipate this water will be injected on our Vaccum.

Will you refer to your Exhibit No. 3?

No. 3 is a structure map of the area contoured on the top of the Devonian which indicates the closure of the pool being a fault plane on the Nortwest side, a fault on the East side and then oil-water contact structure of the Southwest and Southwest and appraently the oil-water contact does run up the fault plane on the East side of the pool. No. 4 is the proposed water well marked in red on the Exhibit, the top of the Devonian marked on there is minus 7,071 feet.

And refer to Exhibit No. 4.

Exhibit No. 4 is a log of the well to 11,154 feet which is the only log which was run on the well. We do not have a log over the open-hole interval.

Is there any fresh water in the area?

No, sir, there is no surface or sub-surface fresh water other than rain.

Do you think that the injection through the five and Q



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a half liner will have any effect on correlative rights at all?

A No, I do not and there are no non-producing zones from top to bottom of this hole.

- Q Have all the offset operators been notified?
- A Yes, they have.
- Q Were Exhibits 1 through 4 prepared by you or under your supervision?
  - A Yes, they were.

MR. BATEMAN: Mr. Examiner, I move the introduction of Texaco's Exhibits 1 through 4.

MR. NUTTER: Texaco's Exhibits 1 through 4 will be admitted in evidence.

Q (By Mr. Bateman) Do you have anything further, Mr. McCarter?

A I might add that in proof of the well being wet besides Texaco not producing it we ran a DST in the Devonian, 11,179 to 11,234 feet. We recovered 11,028 feet of water cushion and 8,080 feet of salty sulphur water.

MR. BATEMAN: That concludes our Direct Examination.

### CROSS EXAMINATION

### BY MR. NUTTER:

Q Mr. McCarter, as I understand it, the well in Section 28 was originally drilled as a Devonian well?



- A Yes, sir.
- Q But it is being used as a Queen Disposal Well?
- A Yes, it is.
- Q Although you have authority to use it for a Devonian Disposal?
- A The well was originally drilled and plugged and we re-entered the well to use the salt water disposal well.
  - Q Cleaned it out only to the Queen?
  - A Only to the Queen.
  - Q How much is it taking in the Queen?
  - A 1600 barrels a day at 2,000 pounds.
- Q You wouldn't begin to approach your 10,000 barrels per day in that formation?
  - A No, sir.
- Q As I understand it, you have amended the Application to be from 11,150 to 11,794. You therefore probably want to amend you Exhibit No. 2 also, wouldn't you, which shows the open hole?
  - A Yes, sir.
  - Q To 750?
  - A Should be amended to 794.
- Q As I understand it, the five and a half inch liner was run from 4800 to 11,150 and afterwards you ran a five and



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SIMMS BLDG. • P.O. BOX 1092 • PHONE 243-6691 • ALBUQUERQUE, NEW MEXICO FIRST NATIONAL BANK EAST • PHONE 256-1294 • ALBUQUERQUE, NEW MEXICO a half inch tieback liner from the surface down to the top of the other liner at 4800 and --

- A Yes, sir.
- Q You have cement circulated or squeezed in from the top on the upper top?
- A The upper part of the five and a half has no cement yes, it is cemented with 550 sacks of Trandi-Lightweight.
- Q I thought that's where you said you calculated 125 percent of the fill so you squeezed at the top?
  - A That's the five and a half liner from 48 down.
  - Q The bottom you squeezed?
  - A Yes.
  - Q Do you have circulation on the top liner?
- A I do not know if we have or not. However, the eight and five-eights intermediate casing has cement on it. Not all the way back either. I do not know. I would doubt that it does.
- Q I think you had better find that out in as much as you do not propose to use tubing here and you would be going down the casing. We need to be sure five and a half inch liner is circulated to the surface ar eight and five-eights circulated to surface. What about annulus between the five and a half liner and eight and five-eights inch casing? Can this be loaded



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with some sort of earth fluid and equipped with a pressure gauge to determine if there is leakage either through the five and a half inch pipe or through the tieback receptacle or some other mechanical leakage there?

A If cement was not circulated back it would be possible, yes, sir.

Q So you will determine and let us know if cement is circulated and if not whether you can load that annulus with fluid?

A Yes, sir. If it was not we will load the annulus with an earth fluid with pressure gauge.

MR. NUTTER: Any further questions of Mr. McCarter?
He may be excused. Anything further, Mr. Bateman?

MR. BATEMAN: Nothing further.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4426? We will continue the case for the Hearing scheduled at 9:30 A.M., October 14, 1970 in this same place and the case will be readvertised to reflect that the disposal interval would be from 11,150 to 11,794 feet in the Devonian. If nothing further, this case is continued.



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COUNTY OF BERNALILLO )

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

COURT REPORTER



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presently disposed of in the B. E. Spencer 'B' Federal Hell No. 1 through perforations opposite the Queen section at 2450' to 2782'. The well is operating at maximum injection pressure and volume.

Reda pump installations are planned for the producing wells in the Little Lucky Lake Pool after the proposed SHO well is ready for use. It is estimated that the injection volume will reach a maximum of 10,000 barrels of water per day with no surface pressure anticipated in disposing of the water.

Injection will be through 5-1/2 inch casing set at 11,150' and 11,794' into an open hole interval from the casing seat to 11,750'. The upper 4800 feet of the 5-1/2 inch disposal string will be plastic coated. Tentative approval to utilize uncoated pipe below 4800 feet has been given by the Oil Conservation Commission since no productive zones exist between the intermediate casing at 5000 feet and the Devonian formation. There are no shallow fresh water zones present in the area of the proposed salt water disposal well.

### DISCUSSION OF THE PEERY FEDERAL WELL HO. 4

The Peery Federal Well No. 4 was spudded July 9, 1970. No shows of oil or gas were encountered in drilling to the Devonian which was topped at 11,070°. Drill stem testing in the Devonian at 11,179° ... 11,234° recovered 1128° water cushion and 8080° of salty sulfur water. In order to assure that sufficient porosity and permeability is exposed to the wellbore for injection, the well will be drilled to a total depth of approximately 11,750°. The additional footage to be drilled will not penetrate below the Devonian horizon.

### RECOMMENDATION

That TEXACO Inc. be permitted to dispose of produced water from its producing properties in the Little Lucky Lake Davonian Field into the Devonian formation by utilizing the Peery Federal Well No. 4. The Peery Federal No. 4, located in Unit A. Section 29, T-15-S, R+30-E, Chaves County, was drilled to a depth of 11,234' in August of 1970 and encountered the Devonian porosity below the oil-water contact. The well will be drilled deeper and the proposed injection interval will be 11,150' to 11,750'.

### DESCRIPTION OF FIELD

The Little Lucky Lake Devonian Field was discovered in 1958 when the TEXACO Peery Federal No. 1 was completed as a producer. Hine wells have been drilled in the area with nine being completed as producers. TEXACO, which is the only Operator in the field, currently has four wells producing 350 barrels of oil, 1600 barrels of water and 1000 MCF of gas per day.

The Little Lucky Lake Devonian is a strong water drive reservoir with the limits of the pool being defined by fault closure and an eil-water contact originally at -7220 feet subsea. An eil-water contact at approximately -7150' currently exists.

## SOURCE AND VOLUME OF WATER

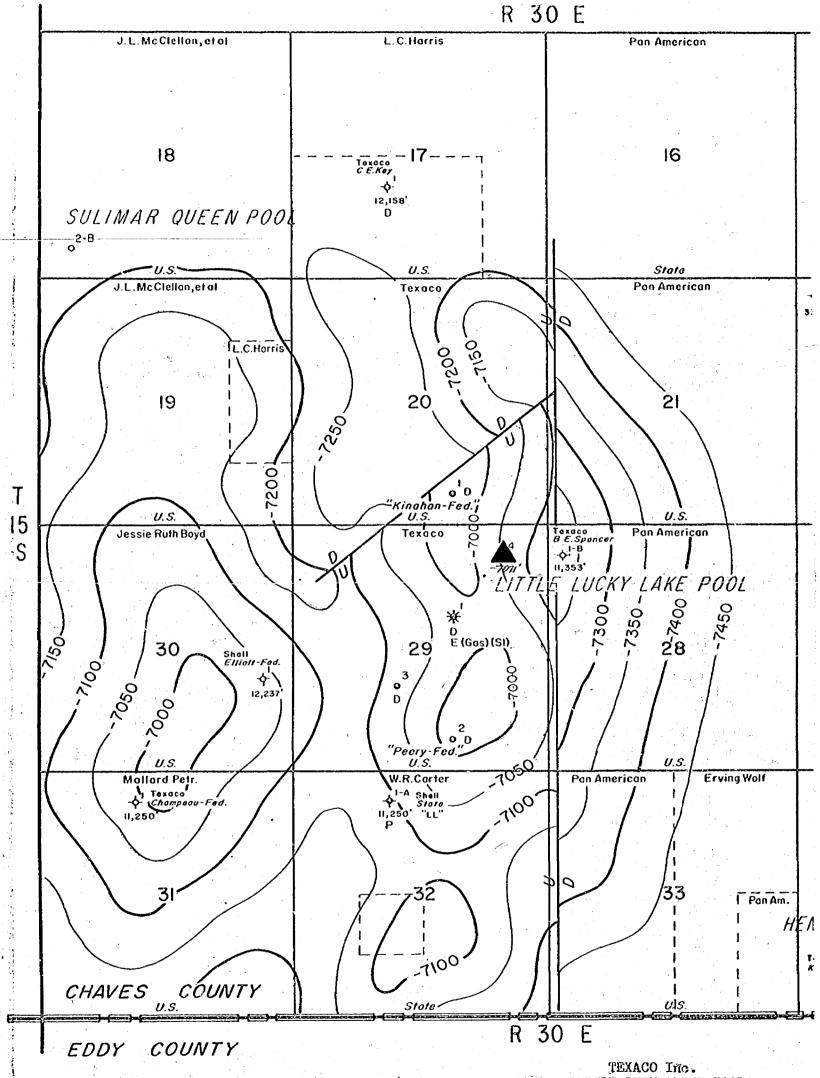
The proposed salt water disposal well will serve TEXACO's V. G. Kinahan and Peery Federal Leases. Produced water from these leases is

### EXHIBITS

- I Ownership plat of area with all wells indicated.
- 11 Schematic diagram of subject well (Peary Federal No. 4).
- III Structure map of area, drawn on top of Davenian.
- IV Log of Peery Federal Hell No. 4 with casing seat indicated.
  - V List of offset operators.

11-3/h" esg. cat at hth!. Comented - with 290 ex. Class "C". Centre Circulated. 5-1/2" Plastic Coated Tie-Back-Liner from surface to 1,800'. Cemented with 550 sx. Trinity Lite-Wate Cement. (125% of Fill). 8-5/8" csg. set at 5000'. Cemented with 900 sx. Trinity Lite-Nate and 200 sx. Class "C". Tie-Back Receptacle. 4800' Top of liner squeezed with 200 sx. Class "C" Cement. 5-1/2" Liner set at 11,150'. Cemented with 380 sx. Trinity Lite-Wate and 200 sx. Class "C". (Theoretical fill to Tie-Back Receptacle). 7-7/8" Open Hole 11,150' to 11,600' BEFORE EXAMINER NUTTER OIL CONSERVATION COMMISSION APPL. EXHIBIT NO. 2 4-5/8" Open Hole 11,600' to 11,750' CASE NO. PROPOSED SALT WATER DISPOSAL WELL. PEERY FEDERAL WELL NO. 4

LITTLE LUCKY LAKE DEVONIAN POOL



LEGEND-

D - DEVONIAN

E - ELLENBURGER

P - PENNSYLVANIAN

△ - PROPOSED SALT WATER DISPOSAL WELL

TEXACO Inc.

LITTLE LUCKY LAKE POOL

CHAVES COUNTY, NEW MEXICO

CONTOURED ON

TOP OF DEVONIAN

CONTOUR INTERVAL - 50'

Scale: 1" = 2000'

CPC/FME 9-4-70

## OFFSET OPERATORS

Jessie Boyd 510 Texas Ave. Artesia, Hew Mexico 88210

W. R. Carter 4715 Pershing El Paso, Taxas 79900

Pan American Petroleum Co. P.O. Bax 1410 Fort Horth, Texas 76101

Erving Holf 308 Lincoln Tower Denver, Colorado 80220



### OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO P. O. BOX 2088 - SANTA FE 87801 LAND COMMISSIONER ALEX J. ARMIJO MEMBER

GOVERNOR
DAVID F. CARGO
CHAIRMAN

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

October 27, 1970

Mr. Ken Bateman White, Gilbert, Koch & Kelly	Re:	Case No. 4426 Order No. R-4046	
Attorneys at Law Post Office Box 787 Santa Fe, New Mexico		Applicant: Texaco Inc.	

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

State Engineer Office	and Bureau of	Land Management
Aztec OCC		
Artesia OCC_X		•
Hobbs OCC X		
Copy of order also sent to:		
ALP/ir		

## 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. 4426 Order No. R-4046

APPLICATION OF TEXACO INC. FOR SALT WATER DISPOSAL, CHAVES COUNTY, NEW MEXICO.

### ORDER OF THE COMMISSION

### BY THE COMMISSION:

This cause came on for hearing at 9:30 a.m. on October 14, 1970, at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 27th day of October, 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,

### FINDS:

- (1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
- (2) That the applicant, Texaco Inc., is the owner and operator of the Peery Federal Well No. 4, located in Unit A of Section 29, Township 15 South, Range 30 East, NMPM, Little Lucky Lake-Devonian Pool, Chaves County, New Mexico.
- (3) That the applicant proposes to utilize said well to dispose of produced salt water into the Devonian formation, with injection into the open-hole interval from approximately 11,150 feet to 11,794 feet.
- (4) That the injection should be accomplished through a 5 1/2-inch plastic-lined liner set at approximately 11,150 feet.

-2-CASE No. 4426 Order No. R-4046

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

### IT IS THEREFORE ORDERED:

- (1) That the applicant, Texaco Inc., is hereby authorized to utilize its Peery Federal Well No. 4, located in Unit A of Section 29, Township 15 South, Range 30 East, NMPM, Little Lucky Lake-Devonian Pool, Chaves County, New Mexico, to dispose of produced salt water into the Devonian formation, injection to be accomplished through a 5 1/2-inch plastic-lined liner set at approximately 11,150 feet, with injection into the open-hole interval from approximately 11,150 feet to 11,794 feet.
- (2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem neces-

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

STATE OF NEW PHOXICO

DAVID F. CARGO, Chairman

ALEX J ARMIJO Member

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

est

### DOCKET: REGULAR HEARING - WEDNESDAY - OCTOBER 14, 1970

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

- ALLOWABLE: (1) Consideration of the oil allowable for November and December, 1970;
  - (2) Consideration of the allowable production of gas for November, 1970, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for November, 1970.
- CASE 4436: (THIS CASE WILL BE HEARD BEFORE THE FULL COMMISSION OR BY EXAMINER DANIEL S. NUTTER)

Application of El Paso Natural Gas Company for the amendment of the General Rules and Regulations governing the prorated gas pools of New Mexico and the amendment of the Special Rules and Regulations governing the Tapacito-Pictured Cliffs and Basin-Dakota Gas Pools located in Rio Arriba, San Juan, and Sandoval Counties, New Mexico. Applicant, in the above-styled cause, seeks the amendment of the General Rules and Regulations governing the prorated gas pools of Northwest and Southeast New Mexico and the Special Rules and Regulations governing the Tapacito-Pictured Cliffs and Basin-Dakota Gas Pools located in Rio Arriba, San Juan, and Sandoval Counties, to permit substantial changes in the method of classifying marginal wells, and the assignment of allowable to marginal wells governed by the aforesaid rules and regulations, as well as a substantial change in the balancing of production procedure required by said rules. Copies of the proposed amendments will be circulated by way of the Commission's general mailing list and will be available upon request made to the Commission at its Santa Fe office.

\* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \* \*

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, IN THE OIL CONSERVATION COMMISSION CONFERENCE ROOM ON THE SECOND FLOOR OF SAID BUILDING AT 9:30 A.M.

- CASE 4437: Southeastern New Mexico nomenclature case calling for the creation, abolishment and extension of certain pools in Lea and Roosevelt Counties, New Mexico.
  - (a) Create a new pool in Lea County, New Mexico, classified as an oil pool for Wolfcamp production and designated as the East Corbin-Wolfcamp Pool. The discovery well is the Phillips Petroleum Company Lea No. 23 located in Unit P of Section 30, Township 17 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM SECTION 30: SE/4

(Case 4437 continued)

(b) Create a new pool in Rossevelt County, New Mexico, classified as a gas pool for Pennsylvanian production and designated as the East New Hope-Pennsylvanian Gas Pool. The discovery well is the H. L. Brown, Jr., Mary Martin No. 1 located in Unit P of Section 29, Township 6 South, Range 34 East, NMPM. Said pool would comprise:

TOWNSHIP 6 SOUTH, RANGE 34 EAST, NMPM SECTION 29: S/2

(c) Abolish the Warren-Abo Pool in Lea County, New Mexico, described as:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM SECTION 25: S/2
SECTION 26: SE/4
SECTION 35: NE/4
SECTION 36: N/2

TOWNSHIP 20 SOUTH, RANGE 39 EAST, NMPM SECTION 30: S/2

(d) Extend the Dk-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM SECTION 25: S/2 SECTION 26: SE/4 SECTION 35: NE/4 SECTION 36: N/2

TOWNSHIP 20 SOUTH, RANGE 39 EAST, NMPM SECTION 30: S/2

(e) Extend the North Baum-Upper Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM SECTION 25: SE/4

(f) Extend the Lea-Bone Springs Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM SECTION 36: SW/4

Examiner Hearing - October 14, 1970

Docket No. 23-70

(Case 4437 continued)

(g) Extend the Townsend-Morrow Gas Pool in Lea County, New Mexico, to include therein:

## TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM SECTION 8: SW/4

(h) Extend the Tres Papalotes-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

## TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM SECTION 34: NW/4

(i) Extend the Tulk-Pennsylvanian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 14 South, Range 32 East, NMPM SECTION 33: SE/4 SECTION 34: S/2

### CASE 4438:

Application of Eastland Oil Company for an exception to Order No. R-3221, as amended, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Order No. R-3221, as amended, which order prohibits the disposal of water produced in conjunction with the production of oil on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico, after January 1, 1969. Said exception would be for applicant's leases comprising the NW/4 NW/4 of Section 5 and the NE/4 NE/4 of Section 6, Township 18 South, Range 31 East, Grayburg-Jackson Field area, Eddy County, New Mexico.

### CASE 4439:

Application of Shenandoah Oil Corporation for an unorthodox gas well location, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks approval for an unorthodox Pennsylvanian well location 1980 feet from the South line and 660 feet from the West line of Section 22, Township 6 South, Range 27 East, undesignated Pennsylvanian gas pool, Chaves County, New Mexico. The S/2 of said Section 22 to be dedicated to the well.

### CASE 4440:

Application of Moran Oil Producing & Drilling Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a pilot waterflood project in the Hobbs Pool by the injection of water into the Grayburg formation through one well located in the NW/4 NE/4 of Section 13, Township 18 South, Range 37 East, Lea County, New Mexico. Applicant further seeks a procedure whereby additional injection wells may be approved administratively.

### CASE 4425: (Readvertised)

Application of Southern Gulf Production Company for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks as an exception to the gas well location requirements of the Commission Rules and Regulations, approval for the Southern Gulf Production Company Navajo Tocito Well No. 4 at an unorthodox gas well location 1963 feet from the South line and 977 feet from the West line of Section 10, Township 26 North, Range 18 West, undesignated Pennsylvanian gas pool, San Juan County, New Mexico.

### CASE 4426: (Readvertised)

Application of Texaco Inc. for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from 11,150 feet to 11,794 feet in its Peery Federal Well No. 4 located in Unit A of Section 29, Township 15 South, Range 30 East, Little Lucky Lake-Devonian Pool, Chaves County, New Mexico.

CASE 4441:

Application of Texaco Inc. for salt water disposal, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Seven Rivers formation in the open-hole interval from 3260 feet to 3415 feet in its C. E. Penny Federal (NCT-4) Well No. 2 located in Unit F of Section 19, Township 25 South, Range 38 East, Langlie Mattix-Seven Rivers Pool, Lea County, New Mexico.

CASE 4442: Application of Texaco Inc. for an exception to Rule 505 of the Commission Rules and Regulations, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Rule 505 of the Commission Rules and Regulations to permit the assignment of more than one single top unit allowable for the Vacuum-Abo Reef Pool to two wells, the surface locations of which are in Unit E of Section 12, Township 18 South, Range 34 East, Lea County, New Mexico, as follows:

> State "AE" Well No. 8 - 2310 feet from the North line and 330 feet from the West line;

> State "AE" Well No. 10 - 1980 feet from the North line and 990 feet from the West line;

Said Well No. 10 is a relatively straight hole with all perforations confined entirely to said Unit 8, while said Well No. 8 is a crooked hole and would have perforations both in said Unit E of Section 12 and in Unit H of Section 11 of said Township and Range.



PETROLEUM PRODUC

EP 18

PRODUCING DEPARTMENT UNITED STATES
MIDLAND DIVISION

September 17, 1970

O SEP

TEXACO INC. P. O. BOX 3109 MIDLAND, TEXAS 79701

EXAMINER HEARING DOCKET NO. 21-70 CASE NO. 4426

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

Attention: Mr. D. S. Nutter

Gentlemen:

In reference to applicant's Exhibit No. 2, a question arose during the hearing as to whether cement was circulated in the angular space between the 5-1/2" plastic coated tie-back string and the 8-5/8" intermediate casing. This is to advise that the cement did circulate back to the surface during this cementing operation.

If there are any further questions or information needed concerning this case, please advise.

Yours very truly,

Darrell Smith
Division Manager

E. D. McCarter

Division Proration Engineer

EDMc/vr

DOCKET MAILED

Date 10-2-70

Docket No. 21-70

### DOCKET: REGULAR HEARING - WEDNESDAY - SEPTEMBER 16, 1970

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

ALLOWABLE: Consideration of the allowable production of gas for October, 1970, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico. Consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for October, 1970.

### CASE 4367: (De Novo)

Application of Mobil Oil Corporation for a waterflood expansion, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Bridges State Waterflood Project, Vacuum Grayburg-San Andres Pool, by the injection of water into the Grayburg San Andres formations through two additional injection wells to be drilled at locations in Township 17 South, Range 34 East, Lea County, New Mexico, as follows:

A well to be drilled at a standard location 2310 feet from the North line and 860 feet from the West line of Section 25; and

A well to be drilled at an unorthodox location 100 feet from the South line and 1980 feet from the West line of Section 26.

Upon application of Mobil Oil Corporation this case will be heard De Novo under the provisions of Rule 1220.

CASE 4368:

Application of Mobil Oil Corporation for a waterflood expansion and amendment of rules governing same, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to expand its Bridges State Waterflood Project, Vacuum Grayburg-San Andres Pool, to the conversion of water injection of 13 additional wells at standard locations in Sections 25, 26, and 27, Township 17 South, Range 34 East, Lea County, New Mexico. Applicant further seeks the amendment of the rules governing said project to permit expansion of the project administratively without a showing of well response.

Upon application of Mobil Oil Corporation this case will be heard  $\underline{De}$  Novo under the provisions of Rule 1220.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER, EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER, IN THE OIL CONSERVATION COMMISSION CONFERENCE ROOM ON THE SECOND FLOOR OF SAID BUILDING AT 9:30 A.M.

CASE 4413:

(Continued from the August 19, 1970, Examiner Hearing)
In the matter of the hearing called by the Oil Conservation Commission upon its own motion to permit Stanley Leonard Jones dba Francisca Corporation and all other interested parties to appear and show cause why the Francisca Corporation Beeman Well No. 1 located 1980 feet from the South and West lines of Section 2, Township 24 South, Range 28 East, Eddy County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program.

- CASE 4416: (Continued for the September 2, 1970, Examiner Hearing)

  Application of Robert L. Parker Trust for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a cooperative waterflood project in the Langlie Mattix Pool on its George L. Erwin Lease by the injection of water through its Erwin Well No. 2 located in Unit L of Section 35, Township 24 South, Range 37 East, Lea County, New Mexico.
- CASE 4424: Southeastern New Mexico nomenclature case calling for an order for the extensions of certain pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico:
  - a) Extend the Blinebry Oil Pool in Lea County, New Mexico, to include therein:

## TOWNSHIP 21 SOUTH, RANGE 36 EAST, NMPM SECTION 25: SE/4

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

## TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM SECTION 17: SE/4

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

## TOWNSHIP 23 SOUTH, RANGE 26 EAST, NMPM SECTION 1: W/2

d) Extend the Double L-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 29 EAST, NMPM SECTION 25: SE/4 SW/4 SECTION 36: NE/4 NW/4

e) Extend the Eagle Creek-San Andres Pool in Eddy County, New Mexico, to include therein:

## TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM SECTION 22: E/2 NE/4

f) Extend the Lusk-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 32 EAST, NMPM SECTION 32: All

REGULAR HEARING - September 16, 1970

Docket No. 21-70

(Case 4424 continued)

g) Extend the Midway-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 37 EAST, NMPM SECTION 16: SW/4

h) Extend the West Sawyer-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 9 SOUTH, RANGE 37 EAST, NMPM SECTION 34: S/2

i) Extend the North Vacuum-Abo Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM SECTION 11: SW/4

j) Extend the North Vacuum-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 34 EAST, NMPM SECTION 14: N/2 SECTION 15: E/2

k) Extend the Vada-Pennsylvanian Pool in Lea and Roosevelt Counties, New Mexico to include therein:

TOWNSHIP 8 SOUTH, RANGE 35 EAST, NMPM SECTION 34: NW/4

TOWNSHIP 8 SOUTH, RANGE 36 EAST, NMPM SECTION 27: SE/4 SECTION 28: NE/4

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM SECTION 24: All SECTION 25: NE/4

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM SECTION 19: N/2 and SW/4

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM SECTION 16: SE/4

CASE 4425: Application of Eastern Petroleum Company as agent for Southern Gulf Production Company for an unorthodox gas well location, San Juan County. New Mexico. Applicant, in the above-styled cause, seeks as an exception to the gas well location requirements of the Commission Rules and Regulations. approval for the Southern Gulf

(Case 4425 continued)

Production Company Navajo Tocito Well No. 4 at an unorthodox gas well location 2023 feet from the South line and 1157 feet from the West line of Section 10, Township 26 North, Range 18 West, undesignated Pennsylvanian gas pool, San Juan County, New Mexico.

CASE 4426:

Application of Texaco Inc. for salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dispose of produced salt water into the Devonian formation in the open-hole interval from 11,150 feet to 11,750 feet in its Peery Federal Well No. 4 located in Unit A of Section 29, Township 15 South, Range 30 East, Little Lucky Lake-Devonian Pool, Chaves County, New Mexico.

CASE 4427:

Application of David F. Fasken for the creation of a new gas pool and special pool rules therefor, and a non-standard gas spacing unit, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Morrow gas pool for his well located 3630 feet from the South line and 660 feet from the East line of Section 1, Township 21 South, Range 25 East, Eddy County, New Mexico, and for the promulgation of special rules therefor, including a provision for 640-acre spacing units. Applicant further seeks approval of a 854.62-acre non-standard gas spacing unit comprising all of said Section 1 to be dedicated to the above-described well.

CASE 4428:

Application of Texas Oil and Gas Corporation for a non-standard gas spacing unit, Eddy County, New Mexico. Applicant, in the abovestyled cause, seeks approval of an approximately 240-acre non-standard gas proration unit comprising the E/2 NE/4, SW/4 NE/4, W/2 NW/4, and SE/4 NW/4 of Section 11, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, to be dedicated to a well to be drilled at a standard location in the N/2 of said Section 11 to test any and all formations from the surface of the ground down to and including the Morrow formation.

CASE 4354:

(Continued from the July 1, 1970, Examiner Hearing) and the August 5, 1970, Examiner Hearing.

Application of Michael P. Grace and Corinne Grace for compulsory pooling, Eddy County, New Mexico. Applicants, in the above-styled cause, seek an order pooling all mineral interests from the surface of the ground down to and including the Morrow formation underlying the N/2 of Section 11, Township 23 South, Range 26 East, South Carlsbad Field, Eddy County, New Mexico, said acreage to be dedicated to a well to be drilled in either the NE/4 NW/4 or the NW/4 NE/4 of said Section 11. Also to be considered will be the costs of drilling said well, a charge for the risk involved, a provision for the allocation of actual operating costs, and the establishment of charges for supervision of said well.

TEXACO INC. PETROLEUM PRODUCTS

August 24; 1970

DRAWER 728 HOBBS, NEW MEXICO 88240

Care 4436

PEQUEST FOR EXAMINER HEARING PEERY FEDERAL WELL NO. 4 LITTLE LUCKY LAKE DEVONIAN POOL CHAVES COUNTY, NEW MEXICO

Oil Conservation Commission (3) P. O. Box 2088 Santa Fe, New Mexico 87501

Attention: Mr. A. L. Porter, Jr.

Gentlemen:

It is requested that an examiner hearing be scheduled for September 16, 1970 at Santa Fe, New Mexico, to consider the application of TEXACO Inc. for permission to dispose of produced water in the Little Lucky Lake Devonian Pool, Chaves County, New Mexico.

At this hearing, TEXACO will ask permission to dispose of produced salt water into their Peery Federal Well No. 4 located in Unit A, Section 29, T-15-S, R-30-E, Chaves County, New Mexico. Disposal will be into the Devonian through open hole from 11,150 to 11,750 feet. Initially, the disposal rate into the well will be approximately 1600 barrels of water per day on gravity. The proposed SWD well is structurally low in the Devonian as indicated by a recent drill stem test which recovered formation water only.

Enclosed with this request are three copies of a plat of the area showing the proposed SWD well and a diagrammatic sketch of the proposed disposal well. Copies of the log of the well are not presently available but will be presented at the hearing.

Copies of this letter are being sent to the offset operators and the U. S. Geological Survey.

Yours very truly,

W. E. Morgan

DOCKET MAILED

District Superintendent Daio-

DOCKET MAKED

DOCKET HAILED

Dato 10-9-70 Date 9-2-70

BRH-jg Attachments cc - U. S. Geological Survey
Department of Interior
Federal Building
Roswell, New Mexico 88201

Jessie Ruth Boyd 510 Texas Ave. Artesia, New Mexico 88210

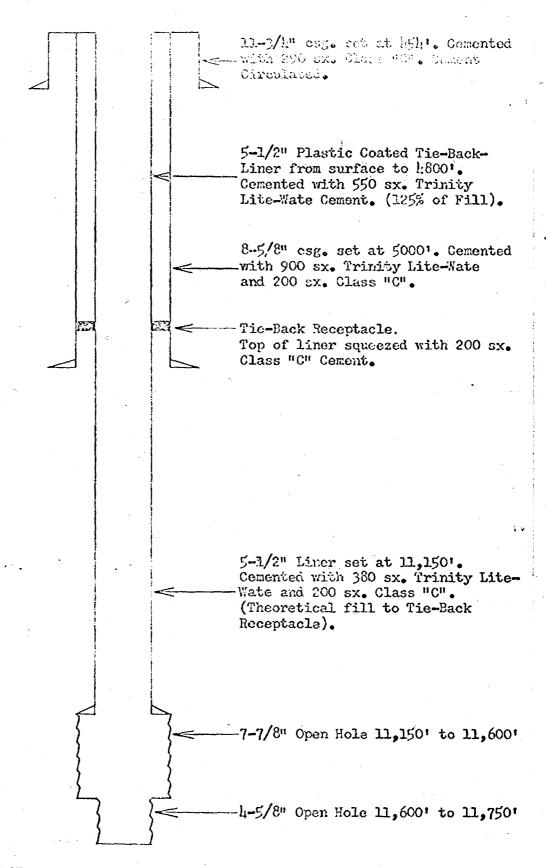
W. R. Carter 4715 Pershing El Paso, Texas 79900

J. L. McClellan Roswell, New Mexico 88201

Mallard Petroleum Inc. 1206 V & J Tower Midland, Texas 79701

Pan American Petroleum Corp. P.O. Box 1410 Ft. Worth, Texas 75101

VSP



PROPOSED SALT WATER DISPOSAL WELL PEERY FEDERAL WELL NO. 4 LITTLE LUCKY LAKE DEVONIAN POOL

1

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

MY	IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION COMMISSION OF NEW MEXICO FOR THE PURPOSE OF CONSIDERING:  CASE No. 4426
* *	Order No. R- <u>7046</u>
	APPLICATION OF TEXACO INC. FOR SALT WATER DISPOSAL, CHAVES COUNTY, NEW MEXICO.
	ORDER OF THE COMMISSION
	BY THE COMMISSION:
	9:30  This cause came on for hearing at $\cancel{9}$ a.m. on October 14 , 1970 at Santa Fe, New Mexico, before Examiner Daniel S. Nutter .
	NOW, on this <u>day of October</u> , 1970, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised in the premises,
·	FINDS:
	(1) That due public notice having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.
	(2) That the applicant, Texaco Inc.
	is the owner and operator of the Peery Federal Well No. 4
	located in Unit A of Section 29, Township 15 South, Range
	30 East , NMPM, Little Lucky Lake-Devonian Pool , Chaves
•	County, New Mexico.
	(3) That the applicant proposes to utilize said well to
-	dispose of produced salt water into the Devonian
	formation, with injection into the open-hole interval

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

from approximately 11.150 feet to 11.794 feet.

approximately //,/50 feet; that the casing tubing annulus should be filled with an inert fluid; and that a pressure gauge should be attached to the annulus or the annulus left open at the surface in order to determine leakage in the casing, tubing, or packer.

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

### IT IS THEREFORE ORDERED:

(1) That the applicant,
is hereby authorized to utilize itsPeery Federal Well No. 4
located in Unit A of Section 29, Township 15 South, Range
30 East , NMPM, Little Lucky Lake-Devonian Pool , Chaves ,
County, New Mexico, to dispose of produced salt water into the
Devonian formation, injection to be accomplished through a plastic line from installed in a packer set at approximately
feet, with injection into theopen-hole interval
from approximately 11,150 feet to 11,794 feet;
PROVIDED HOWEVER, that the tubing shall be plastic-lined;
that the dasing-tubing annulus shall be filled with an inert
fluid; and that a pressure gauge shall be attached to the annulus
or the annulus left open at the surface in order to determine
leakage in the casing, tubing, or packer.

- (2) That the applicant shall submit monthly reports of its disposal operations in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.
- (3) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

CASE 4427: Application of DAVID F. FASKEN for new pool, rules & non-standard gas spacing unit.