

Case Number

4337

Application  
Transcripts.

Small Exhibits

ETC.

dearnley-meier

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  
May 13, 1970

EXAMINER HEARING

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IN THE MATTER OF: )  
)  
)  
)

Application of Petroleum Corporation )  
of Texas for an exception to Order )  
No. R-3221, as amended, Eddy County, )  
New Mexico. )  
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Case No. 4337

BEFORE: Daniel S. Nutter, Examiner.

TRANSCRIPT OF HEARING

MR. NUTTER: Call Case 4337.

MR. HATCH: Case 4337. Continued from the April 15, 1970, Examiner Hearing. Application of Petroleum Corporation of Texas for an exception to Order No. R-3221, as amended, Eddy County, New Mexico.

MR. CAMPBELL: Mr. Examiner, I am Jack M. Campbell of Stephenson, Campbell and Olmsted, Santa Fe, New Mexico, appearing on behalf of the Applicant, Petroleum Corporation of Texas.

MR. NUTTER: And you have one witness to be sworn?

MR. CAMPBELL: I have one witness to be sworn.

(Whereupon, Applicant's Exhibits 1 through 4 were marked for identification.)

(Witness sworn.)

MR. NUTTER: Are there any other appearances in this case? Please proceed.

KENNETH A. FREEMAN

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

DIRECT EXAMINATION

BY MR. CAMPBELL:

Q Will you state your name, please?

A Kenneth A. Freeman.

Q Where do you work, by whom are you employed and in what capacity?

A I work in Midland, Texas for the Petroleum Corporation of Texas as the District Superintendent.

Q Have you testified previously before this Commission or its Examiners as a professional engineer?

A Yes, I have.

MR. CAMPBELL: Are the witness' qualifications acceptable, Mr. Examiner?

MR. NUTTER: Yes, they are.

Q (By Mr. Campbell) I refer you to what has been identified as Applicant's Exhibit No. 1 in this case and ask you if you will describe what this Exhibit reflects.

A Exhibit 1 shows the general location; the well in question is located in Section 22 in Location "J" which is approximately a mile and a half east of Loco Hills.

You will notice three red dots, one in Section 15, one in Section 14 and another in Section 22. These are the locations of wells which I will bring up later as to their gamma ray logs and the cable tool logs.

MR. CAMPBELL: I would like to offer Applicant's Exhibit No. 1 in evidence, please.

MR. NUTTER: Exhibit No. 1 will be admitted in evidence.

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

Q (By Mr. Campbell) I now refer you, Mr. Freeman,

to Applicant's Exhibit No. 2 and ask you to state what that is, please.

A Exhibit 2 is a well log on the subject well, the Dexter Federal No. 1-J, which is located in Section 22 and this log is from the surface to total depth and in the right-hand column, if you will note, I have made various descriptions of the formation.

Zero to fifty is alluvium and red beds, and then from fifty foot to 340 foot is the dockum group, which is anhydrite and red beds and anhydrite at 340 foot. The top of the salt is at 42 and I have continued to do this to the TD of the well which was drilled to the Abo Reef.

Q Does this log reflect whether or not any water was encountered at shallow depths in the well?

A This well was drilled with cable tools from surface to 1450 foot and in the driller's report, there was no indication of any fresh water and from the gamma ray log, which was in the left-hand section, I cannot detect any and to my knowledge of the area there is not any fresh water present.

Q I refer you now to what has been identified as Applicant's Exhibit No. 3 and ask you what that is, please?

A Well, Exhibit 3 is a summation of the well showing the depth and breakdown of the formation, basically the way it was done by the cable tool driller and the electric log.

In the lower part here, I have the three wells that I pointed out on Exhibit 1 that were also mentioned. On the Flint "B" No. 1, which we applied for an exception to the no-pit order several months past and it was granted, there is a log on it. However, in the Dexter No. 1, located in Section 15 and the Dexter No. 3, located in Section 22, there is no open-hole logs and all we have to go by is cable tool logs, but I think that this points out that the area is continuous throughout, as far as the red beds and the salt and etcetera.

Q Let's refer first to the Flint "B" No. 1 Well, which is the well covered by Order No. R-3812 in Case No. 4179, in which you said there was a log and the log was made apart of the record in that case.

Did you have occasion to compare that log with the log which has been introduced here as Applicant's Exhibit No. 2?

A Yes, I have. The Flint "B" Well was this drilled through the Grayburg, while the log that we are introducing now is through the Abo, but the upper part from the Grayburg to the surface is the same for all practical purposes.

Q Did you have occasion to look at what drilling data was available on the Dexter No. 1-15 Well and the Dexter No. 3 Well which was shown also in red on Applicant's Exhibit No. 1?

A Yes, I have. The driller's logs that was in the well file lacked something to be desired, but it will show anhydrite and salt and so forth basically compare to the open-hole logs, and in my opinion, you would say that they were comparable.

MR. CAMPBELL: I would like to ask that Applicant's Exhibits No. 2 and 3 be admitted into evidence.

MR. NUTTER: Exhibits 2 and 3 will be admitted into evidence.

(Whereupon, Applicant's Exhibits 2 and 3 were offered and admitted into evidence.)

Q (By Mr. Campbell) Now, Mr. Freeman, give us a summary of the production history of this well involved in this application and its present production?

A Well, this Dexter Federal No. 1-J is a marginal Abo Reef producer. We have taken recent tests within the last ten days and we got 19 barrels of oil and 100 barrels of water and to haul the water, which we are currently doing, is costing us -- this is to haul it by truck and to dispose of it into separate disposal wells -- is costing us 25 cents a barrel and this makes it basically noneconomical to operate and this is why we are asking for the exception to the --

Q Do you believe that if you are required to continue to haul it this distance, at this cost, that this could cause premature abandonment of this well and the waste of possible

oil production?

A Yes, I do.

Q I refer you now to what's been identified as Applicant's Exhibit No. 4; ask you to please state what that is.

A Exhibit 4 is a water analysis and the water was taken from the wellhead of the Dexter Federal No. 1-J and sent in to Cochran Chemical Technologists and they have a chemist who is registered to run water samples and so forth and the purpose of this was twofold, number one, to point out what the water had in it as far as the chemical content and then, number two, what we needed to do for the chemical treatment of the well.

I am entering this as an exhibit just to point out what the composition of the produced water is.

MR. CAMPBELL: I would like to offer Applicant's Exhibit No. 4 in evidence.

MR. NUTTER: Exhibit 4 will be admitted in evidence.

(Whereupon, Applicant's Exhibit 4 was offered and admitted into evidence.)

Q (By Mr. Campbell) Now, Mr. Freeman, based upon the information that you have available and have examined with regard to this well, and upon concluding your comparison with other wells which are identified on Applicant's Exhibit No. 1, is it your opinion that this water can be disposed



of in surface pits without any risk of endangering fresh water supplies in the area of the well?

A Yes, it can, in my estimation.

MR. CAMPBELL: That's all the questions I have now, Mr. Examiner.

MR. NUTTLER: Mr. Campbell, first, I would like to ask you to repeat that order number and the case number at the time of the exception.

MR. CAMPBELL: Order No. R-3812 in Case No. 4179, dated August 14, 1969.

MR. NUTTLER: Thank you.

CROSS EXAMINATION

BY MR. NUTTLER:

Q Mr. Freeman, where is the nearest fresh water that you know of in this area?

A To my knowledge, there is a windmill that is approximately two to two and a half miles west of Loco Hills, which puts it outside this three-mile radius that I have circled.

Q And that's the only water that you know of?

A That's the only water that I know of.

Q Now, the community of Loco Hills here. Does it have any water wells or is there an available supply of water for that little town?

A No. They bring their water in from the Caprock

system, is my understanding. They have a line laid into the City.

Q And the Commission, by Order R-3812, did grant an exception to Texas American for this well in the southwest southwest of Section 14, is this correct?

A Yes, it was granted to Petroleum Corporation of Texas.

Q And, are there any other exceptions in the area that you know of?

A Yes, sir, there is one other. Just a moment.

MR. CAMPBELL: There is an exception, Mr. Examiner, included in Order No. R-3734 in Case No. 4102, dated April 22, 1969, to W. H. McKinley, for the Applicant's wells covering the entire northeast quarter of Section 1, Township 17 South, Range 30 East.

MR. NUTTER: So, that would be right up there, isn't it? That would be northeast of this proposed exception, approximately three or four miles east?

MR. CAMPBELL: Yes, that appears to be the case. That's the only one of which we have immediate knowledge, unless Mr. Freeman knows of others.

THE WITNESS: I believe within this three mile-radius -- I can't point it out right now, but if we will check the records -- I believe that Mr. McKnight was granted another exception.

It seems like it was in either Section 11 or 12, but I'm not positive. I can't find it on this map.

MR. NUTTER: Are there any further questions of Mr. Freeman? He may be excused. Do you have anything further, Mr. Campbell?

MR. CAMPBELL: No, Mr. Examiner, that's all.

MR. NUTTER: Does anyone have anything they wish to offer in Case 4337? We will take the case under advisement.

I N D E X

<u>WITNESS</u>		<u>PAGE</u>
KENNETH A. FREEMAN		
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<u>EXHIBIT</u>	<u>MARKED</u>	<u>OFFERED AND ADMITTED</u>
Applicant's 1	2	3
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Alinda S. S. S.  
NOTARY PUBLIC

March 12, 1973

I do hereby certify that the foregoing is  
a correct and true copy of the original  
the Bureau of Land Management, U.S. Department of the Interior.  
New Mexico Oil Conservation Commission  
5/13 4337-70

BEFORE THE  
NEW MEXICO OIL CONSERVATION COMMISSION  
Hobbs, New Mexico  
April 15, 1970

REGULAR HEARING

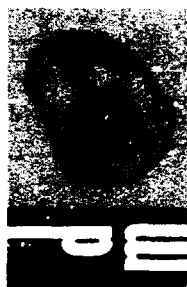
IN THE MATTER OF:

Application of Petroleum Corporation )  
of Texas for an exception to Order No.) Case No. 4337  
R-3221, as amended, Eddy County, New )  
Mexico. )

BEFORE: A. L. Porter, Secretary-Treasurer  
~~David F. Cargo, Governor~~  
George Hatch, General Counsel

*Daniel S. Muller, Examiner*

TRANSCRIPT OF HEARING



dearnley-meier

SPECIALIZING IN: DEPOSITIONS, HEARINGS, STATEMENTS, EXPERT TESTIMONY, DAILY COPY, CONVENTIONS  
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MR. MUSTER: We will call next Case, 4337.

MR. HATCH: Case 4337. Application of Petroleum Corporation of Texas for an exception to Order No. P-3221, as amended, Bddy County, New Mexico.

The Commission has received a request that this application be continued to the first examiner hearing in May, which I believe is set for May 13.

MR. MUSTER: Case Number 4337 will be continued to the Examiner Hearing which will be held at the State Land Office Building, Santa Fe, New Mexico, on May 13, 1979.

STATE OF NEW MEXICO )  
 )  
COUNTY OF BERNALILLO )

I, BRENDA BURNS, 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.

Brenda Burns  
Court Reporter

I do hereby certify that the foregoing is  
a complete and correct transcript of the proceedings in  
the hearing held on the 10th day of \_\_\_\_\_  
before the Commission.

\_\_\_\_\_  
New Mexico Oil Conservation Commission



DOCKET: REGULAR HEARING -- WEDNESDAY -- MAY 13, 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 June, 1970;
- (2) Consideration of the allowable production of gas for June, 1970, from fifteen prorated pools in Lea, Eddy, Roosevelt and Chaves Counties, New Mexico; also presentation of purchaser's nominations for said pools for the six-month period beginning July 1, 1970; consideration of the allowable production of gas from nine prorated pools in San Juan, Rio Arriba and Sandoval Counties, New Mexico, for June, 1970.

THE FOLLOWING CASES WILL BE HEARD BEFORE DANIEL S. NUTTER,  
EXAMINER, OR ELVIS A. UTZ, ALTERNATE EXAMINER:

CASE 4354: 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.

CASE 4355: Application of Pan American Petroleum Corporation for pool consolidation, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the consolidation of the North Bagley-Upper Pennsylvanian and North Bagley-Lower Pennsylvanian Pools, Lea County, New Mexico, into one pool. Applicant further requests the Lower Pennsylvanian Allowable Factor be applied to the consolidated pool.

CASE 3727 (Reopened) :

In the matter of Case 3727 being reopened pursuant to the provisions of Order No. R-3428, which order established 640-acre spacing units for the Rock Tank-Upper Morrow and Rock Tank-Lower Morrow Gas Pools, Eddy County, New Mexico, for a period of one year after first pipeline connection in either of the pools. All interested persons may appear and show cause why said pools should not be developed on 320-acre spacing units.

CASE 4356: Southeastern nomenclature case calling for an order for the creation, abolishment, extension and contraction of certain pools in Lea, Eddy, Chaves and Roosevelt Counties, New Mexico.

(a) Create a new pool in Lea County, New Mexico, classified as a gas pool for Morrow production and designated as the Baum-Morrow Gas Pool. The discovery well is the RK Petroleum Corporation State No. 1 located in Unit B of Section 27, Township 13 South, Range 32 East, NMPM. Said pool would comprise:

TOWNSHIP 13 SOUTH, RANGE 32 EAST, NMPM  
SECTION 27: N/2

(b) Create a new pool in Lea County, New Mexico, classified as a gas pool for Queen-Penrose production and designated as the East Querecho Plains-Queen Gas Pool. The discovery well is Robert N. Enfield's Hudson Federal No. 1 located in Unit O of Section 30, Township 18 South, Range 33 East, NMPM.

TOWNSHIP 18 SOUTH, RANGE 33 EAST, NMPM  
SECTION 30: SE/4

(c) Abolish the Bluitt-San Andres Pool in Roosevelt County, New Mexico, described as:

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM  
SECTION 7: All  
SECTION 8: All  
SECTION 17: All  
SECTION 18: All

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

TOWNSHIP 8 SOUTH, RANGE 38 EAST, NMPM  
SECTION 8: S/2  
SECTION 17: W/2

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

TOWNSHIP 12 SOUTH, RANGE 33 EAST, NMPM  
SECTION 4: NE/4

(Case 4356 continued)

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

TOWNSHIP 11 SOUTH, RANGE 33 EAST, NMPM  
SECTION 33: E/2

TOWNSHIP 12 SOUTH, RANGE 33 EAST, NMPM  
SECTION 4: NE/4

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

TOWNSHIP 13 SOUTH, RANGE 34 EAST, NMPM  
SECTION 34: NW/4

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM  
SECTION 8: NW/4

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

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
SECTION 12: E/2 NE/4

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

TOWNSHIP 18 SOUTH, RANGE 38 EAST, NMPM  
SECTION 33: NE/4

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

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
SECTION 35: SE/4

TOWNSHIP 20 SOUTH, RANGE 34 EAST, NMPM  
SECTION 2: E/2

(k) Extend the Rock Tank-Lower Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
SECTION 12: All

(1) Extend the Rock Tank-Upper Morrow Gas Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 23 SOUTH, RANGE 24 EAST, NMPM  
SECTION 12: All

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

TOWNSHIP 14 SOUTH, RANGE 32 EAST, NMPM  
SECTION 34: NE/4

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

TOWNSHIP 15 SOUTH, RANGE 32 EAST, NMPM  
SECTION 9: NE/4

CASE 4301: (Continued from the March 25, 1970, Examiner Hearing)

In the matter of the hearing called by the Oil Conservation Commission on its own motion to permit Robert T. Smith and all other interested persons to appear and show cause why the following Robert T. Smith wells located in Section 32, Township 20 North, Range 9 West, McKinley County, New Mexico, should not be plugged and abandoned in accordance with a Commission-approved plugging program:

State Well No. 1 located 487 feet from the North line and 990 feet from the East line;

State "A" Well No. 1 located 400 feet from the North line and 990 feet from the East line;

State Well No. 3 located 330 feet from the North line and 330 feet from the West line;

State Well No. 6 located 220 feet from the North line and 1485 feet from the East line;

State Well No. 6-Y located approximately 5 feet West of the above-described Well No 6;

State Well No. 8 located 1155 feet from the North line and 2475 feet from the East line.

- CASE 4337: (Continued from the April 15, 1970, Examiner Hearing)  
Application of Petroleum Corporation of Texas 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. Said exception would be for applicant's Dexter Hanagan Graridge Federal Well No. 1 located in Unit J, Section 22, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.
- CASE 4336: (Continued from the April 15, 1970, Examiner Hearing)  
Application of Byron McKnight for an exception to Order No. R-3221, as amended, Lea 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 or gas on the surface of the ground in Lea, Eddy, Chaves and Roosevelt Counties. Said exception would be for applicant's lease comprising all of Section 19, W/2 of Section 20, NW/4 Section 29, and NW/4 Section 30, Township 19 South, Range 34 East, undesignated Yates-Seven Rivers gas pool, Lea County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits on the leases.
- CASE 4084: (Reopened) (Continued from the April 15, 1970, Examiner Hearing).  
In the matter of Case No. 4084 being reopened pursuant to the provisions of Order No. R-3732, which order established 160-acre spacing units and an 80-acre proportional factor of 4.77 for the Feather-Wolfcamp Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

CASE 4351: (Continued from the April 29, 1970, Examiner Hearing)  
Application of Humble Oil & Refining Company for well reclassification and simultaneous dedication of acreage, Lea County, New Mexico. Applicant, in the above-styled cause, seeks the reclassification of its New Mexico "G" State Well No. 5 from an oil well in the Eumont Pool to a gas well in said pool. Applicant further seeks the dedication of a standard 640-acre gas proration unit comprising all of Section 23, Township 21 South, Range 36 East, Lea County, New Mexico, to said Well No. 5 and to applicant's New Mexico "G" State Well No. 9, located, respectively in Units E and G of said Section 23, and authority to produce the allowable assigned to said unit from either of said wells in any proportion.

CASE 4352: (Continued from the April 29, 1970, Examiner Hearing)  
Application of Jack L. McClellan for the creation of a new gas pool or, in the alternative, the establishment of pool rules for two existing pools, Chaves and Lea Counties, New Mexico. Applicant, in the above-styled cause, seeks the creation of a new Queen gas pool comprising the following-described acreage:

CHAVES COUNTY, NEW MEXICO

TOWNSHIP 15 SOUTH, RANGE 29 EAST

Section 11: SE/4  
Section 12: SW/4  
Section 13: NW/4  
Section 14: E/2  
Section 23: NE/4 and SW/4

In the alternative applicant seeks the promulgation of special rules for the Sulimar-Queen Pool, Chaves County, and Double L-Queen Pool, Chaves and Lea Counties, New Mexico, as separate or as consolidated pools, including provisions for the classification of oil and gas wells, spacing and well location requirements for oil and gas wells, and an allocation formula for withdrawals by oil wells and gas wells.

DOCKET: REGULAR HEARING - WEDNESDAY - APRIL 15, 1970

OIL CONSERVATION COMMISSION - 9 A.M. - THE HOLIDAY INN. 200 SOUTH LINAM,  
HOBBS, NEW MEXICO

- ALLOWABLE: (1) Consideration of the oil allowable for May, 1970;
- (2) Consideration of the allowable production of gas for May, 1970, from fifteen prorated pools in Lea, Eddy, Chaves and Roosevelt 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 May, 1970.

THE FOLLOWING CASES WILL BE HEARD BY THE COMMISSION OR BY  
A. L. PORTER, Jr., EXAMINER OR DANIEL S. NUTTER, ALTERNATE  
EXAMINER:

CASE 4332: In the matter of the hearing called by the Oil Conservation Commission upon its own motion to consider the inclusion of the NW/4 of Section 10, Township 9 South, Range 36 East, Lea County, New Mexico, in the Allison-Pennsylvanian Pool or the Vada-Pennsylvanian Pool, whichever is proper.

CASE 4333: Application of Phillips Petroleum Company for a dual completion and salt water disposal, Chaves County, New Mexico. Applicant, in the above-styled cause, seeks authority to dually complete its Marley "A" Well No. 1, a wildcat well, located in Unit P of Section 3, Township 11 South, Range 31 East, Chaves County, New Mexico, in such a manner as to permit the production of oil from the San Andres formation through perforations from 4148 feet to 4165 feet and the disposal of produced salt water into the San Andres formation through the perforated interval from 4344 feet to 4800 feet.

CASE 4084: (Reopened)

In the matter of Case No. 4084 being reopened pursuant to the provisions of Order No. R-3732, which order established 160-acre spacing units and an 80-acre proportional factor of 4.77 for the Feather-Wolfcamp Pool, Lea County, New Mexico. All interested parties may appear and show cause why the said pool should not be developed on less than 160-acre spacing units and to show cause why the 80-acre proportional factor of 4.77 should or should not be retained.

- CASE 4334: Application of Pan American Petroleum Corporation for an unorthodox gas well location, San Juan County, New Mexico. Applicant, in the above-styled cause, seeks authority to recomplete its State Gas Com "BG" Well No. 1 at an unorthodox location 1450 feet from the North line and 1490 feet from the West line of Section 2, Township 29 North, Range 10 West, Blanco-Mesaverde Pool, San Juan County, New Mexico, the N/2 of said section to be dedicated to the well.
- CASE 4335: Application of Gulf Oil Corporation for a waterflood project, Lea County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project in the Vacuum (Grayburg-San Andres) Pool by the injection of water into the San Andres formation through its Lea "FE" State Wells Nos. 2 and 4, located in Units C and E, respectively, of Section 11, Township 17 South, Range 34 East, Lea County, New Mexico.
- CASE 4336: Application of Byron McKnight for an exception to Order No. R-3221, as amended, Lea 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 or gas on the surface of the ground in Lea, Eddy, Chaves, and Roosevelt Counties. Said exception would be for applicant's lease comprising all of Section 19, W/2 Section 20, NW/4 Section 29, and NW/4 Section 30, Township 19 South, Range 34 East, undesignated Yates-Seven Rivers gas pool, Lea County, New Mexico. Applicant seeks authority to dispose of salt water produced by wells on said leases in unlined surface pits on the leases.
- CASE 3859: (Continued from the October 15, 1969, Regular Hearing)  
Application of Wilson Oil Company for an exception to Order No. R-3221, as amended, Lea County, New Mexico. Applicant, in the above-styled cause, seeks an exception to Commission 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 in Sections 13, 23, and 24 of Township 21 South, Range 34 East, and Sections 7 and 18 of Township 21 South, Range 35 East, Wilson Yates-Seven Rivers Pool, Lea County, New Mexico. Applicant, seeks authority to continue to dispose of produced water in seven unlined surface pits located in the center of the W/2 of said Section 13, center of the W/2 SE/4 of said Section 13, SW/4 NE/4 of said Section 23, center of SW/4 of said Section 24, center of the NE/4 of said Section 7, NE/4 SW/4 of said Section 7, NW/4 NW/4 of said Section 18.



(Case 3859 continued)

In the alternative, applicant seeks an extension of time in which to comply with the provisions of said order.

CASE 4337: Application of Petroleum Corporation of Texas 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. Said exception would be for applicant's Dexter Hanagan Graridge Federal Well No. 1 located in Unit J, Section 22, Township 17 South, Range 30 East, Jackson-Abo Pool, Eddy County, New Mexico. Applicant seeks authority to dispose of salt water produced by said well in an unlined surface pit in the vicinity of said well.

CASE 4338: Application of Skelly Oil Company for a waterflood project, Eddy County, New Mexico. Applicant, in the above-styled cause, seeks authority to institute a waterflood project on its Lea "D" Lease by selective injection of water into various zones of the Grayburg-Jackson Pool through three wells located in Units B, H, and J of Section 26, Township 17 South, Range 31 East, Eddy County, New Mexico. Applicant further seeks a procedure whereby said project may be expanded administratively without a showing of well response.

CASE 4339: Southeastern nomenclature case calling for an order for the creation of certain new pools and the assignment of oil discovery allowables and the contraction and extension of certain other pools in Lea, Chaves and Eddy Counties, New Mexico.

(a) Create a new pool in Chaves County, New Mexico, classified as an oil pool for San Andres production and designated as the Tower-San Andres Pool comprising the following:

TOWNSHIP 11 SOUTH, RANGE 31 EAST, NMPM  
SECTION 3: SE/4

(Case 4339 continued)

Further, for the assignment of approximately 20,740 barrels of oil discovery allowable to the discovery well Phillips Petroleum Company's Marley "A" Well No. 1, located in Unit P of said Section 3.

(b) Create a new pool in Lea County, New Mexico, classified as an oil pool for Pennsylvanian production and designated as the Tres Papalotes-Pennsylvanian Pool, comprising the following:

TOWNSHIP 14 SOUTH, RANGE 34 EAST, NMPM  
SECTION 33: NE/4

Further, for the assignment of approximately 52,340 barrels of oil discovery allowable to the discovery well Lone Star Producing Company's New Mexico (80) State Well No. 1 located in Unit B of said Section 33.

(c) Create a new pool in Eddy County, New Mexico, classified as an oil pool for Cherry Canyon production and designated as the Sand Dunes-Cherry Canyon Pool. The discovery well is Texas American Oil Corporation's Todd 26 Federal Well No. 2 located in Unit G of Section 26, Township 23 South, Range 31 East, NMPM. Said pool would comprise:

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

(d) Create a new pool in Lea County, New Mexico, classified as an oil pool for Devonian production and designated as the Warren-Devonian Pool. The discovery well is Continental Oil Company's SEMU Burger B No. 58 located in Unit C of Section 29, Township 20 South, Range 38 East, NMPM. Said pool would comprise:

TOWNSHIP 20 SOUTH, RANGE 38 EAST, NMPM  
SECTION 29: NW/4

(e) Extend the Buffalo Valley-Pennsylvanian Gas Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 14 SOUTH, RANGE 27 EAST, NMPM  
SECTION 26: S/2

Case 4389 continued

(f) Extend the East Caprock-Devonian Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 12 SOUTH, RANGE 32 EAST, NMPM  
SECTION 23: NE/4

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

TOWNSHIP 17 SOUTH, RANGE 25 EAST, NMPM  
SECTION 23: NW/4 NW/4

(h) Extend the South Eunice-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 22 SOUTH, RANGE 37 EAST, NMPM  
SECTION 11: NE/4

(i) Extend the Maljamar Grayburg-San Andres Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 17 SOUTH, RANGE 33 EAST, NMPM  
SECTION 9: NE/4  
SECTION 10: NW/4

(j) Extend the Quail Ridge-Morrow Gas Pool in Lea County, New Mexico, to include therein:

TOWNSHIP 19 SOUTH, RANGE 34 EAST, NMPM  
SECTION 20: All

(k) Extend the Round Tark-Queen Pool in Chaves County, New Mexico, to include therein:

TOWNSHIP 15 SOUTH, RANGE 29 EAST, NMPM  
SECTION 30: W/2 NW/4 and NW/4 SW/4

(l) Extend the Shugart Pool in Eddy County, New Mexico, to include therein:

TOWNSHIP 18 SOUTH, RANGE 30 EAST, NMPM  
SECTION 25: W/2 NW/4

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

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM  
SECTION 14: S/2

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

TOWNSHIP 9 SOUTH, RANGE 33 EAST, NMPM  
SECTION 13: S/2

TOWNSHIP 9 SOUTH, RANGE 34 EAST, NMPM  
SECTION 18: S/2

TOWNSHIP 9 SOUTH, RANGE 35 EAST, NMPM  
SECTION 10: SE/4  
SECTION 14: S/2  
SECTION 15: NE/4  
SECTION 23: NW/4



# OIL CONSERVATION COMMISSION

STATE OF NEW MEXICO

**P. O. BOX 2088 - SANTA FE**

07801

GOVERNOR  
DAVID F. CARGO  
CHAIRMAN

LAND COMMISSIONER  
ALEX J. ARMIJO  
MEMBER

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

May 20, 1970

Mr. Jack Campbell  
Stephenson, Campbell & Olmsted  
Attorneys at Law  
Post Office Box 877  
Santa Fe, New Mexico

Re: Case No. 4337  
Order No. R-3966  
Applicant:  
PETROLEUM CORPORATION OF TEXAS

**Dear Sir:**

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

Very truly yours,

G. L. Parker, Jr.

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

ALP/ir

**Copy of order also sent to:**

Hobbs OCC       x      

Artesia OCC x

**Aztec OCC**

**Other State Engineer Office**

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4337  
Order No. R-3966

APPLICATION OF PETROLEUM CORPORATION  
OF TEXAS FOR AN EXCEPTION TO ORDER  
NO. R-3221, AS AMENDED, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 13, 1970,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this 20th day of May, 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, Petroleum Corporation of Texas, is  
the owner and operator of the Dexter Hanagan Graridge Federal Well  
No. 1, located in Unit J of Section 22, Township 17 South, Range  
30 East, NMPM, Jackson-Abo Pool, Eddy County, New Mexico.

(3) That Order (3) of Commission Order No. R-3221, as  
amended, prohibits, in that area encompassed by Lea, Eddy, Chaves,  
and Roosevelt Counties, New Mexico, the disposal, subject to minor  
exceptions, of water produced in conjunction with the production  
of oil or gas, or both, on the surface of the ground, or in any  
pit, pond, lake, depression, draw, streambed, or arroyo, or in  
any watercourse, or in any other place or in any manner which

-2-

CASE No. 4337  
Order No. R-3966

would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

(5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.

(6) That the applicant seeks an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water produced by applicant's aforesaid Dexter Hanagan Graridge Federal Well No. 1 in an unlined surface pit in the vicinity of said well.

(7) That there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or will be made that would be impaired by contamination from the subject pit.

(8) That the applicant should be permitted to dispose of water produced by said Dexter Hanagan Graridge Federal Well No. 1 in an unlined surface pit located in the vicinity of said well.

IT IS THEREFORE ORDERED:

(1) That the applicant, Petroleum Corporation of Texas, is hereby granted an exception to Order (3) of Commission Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, by its Dexter Hanagan Graridge Federal Well No. 1, located in Unit J of Section 22, Township 17 South, Range 30 East, NMPM, Jackson-Abo Pool, Eddy County, New Mexico, in an unlined surface pit located in the vicinity of said well.

(2) That the Secretary-Director of the Commission may by administrative order rescind such authority whenever it

-3-

CASE No. 4337  
Order No. R-3966

reasonably appears to the Secretary-Director that such rescission would serve to protect fresh water supplies from contamination.

(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



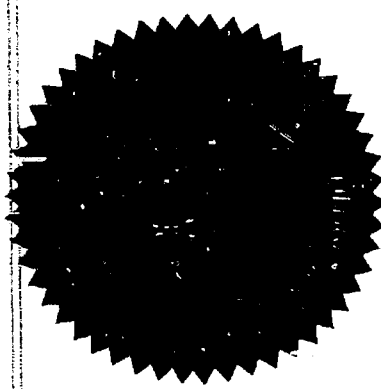
DAVID F. CARGO, Chairman



ALEX J. ARMIJO, Member

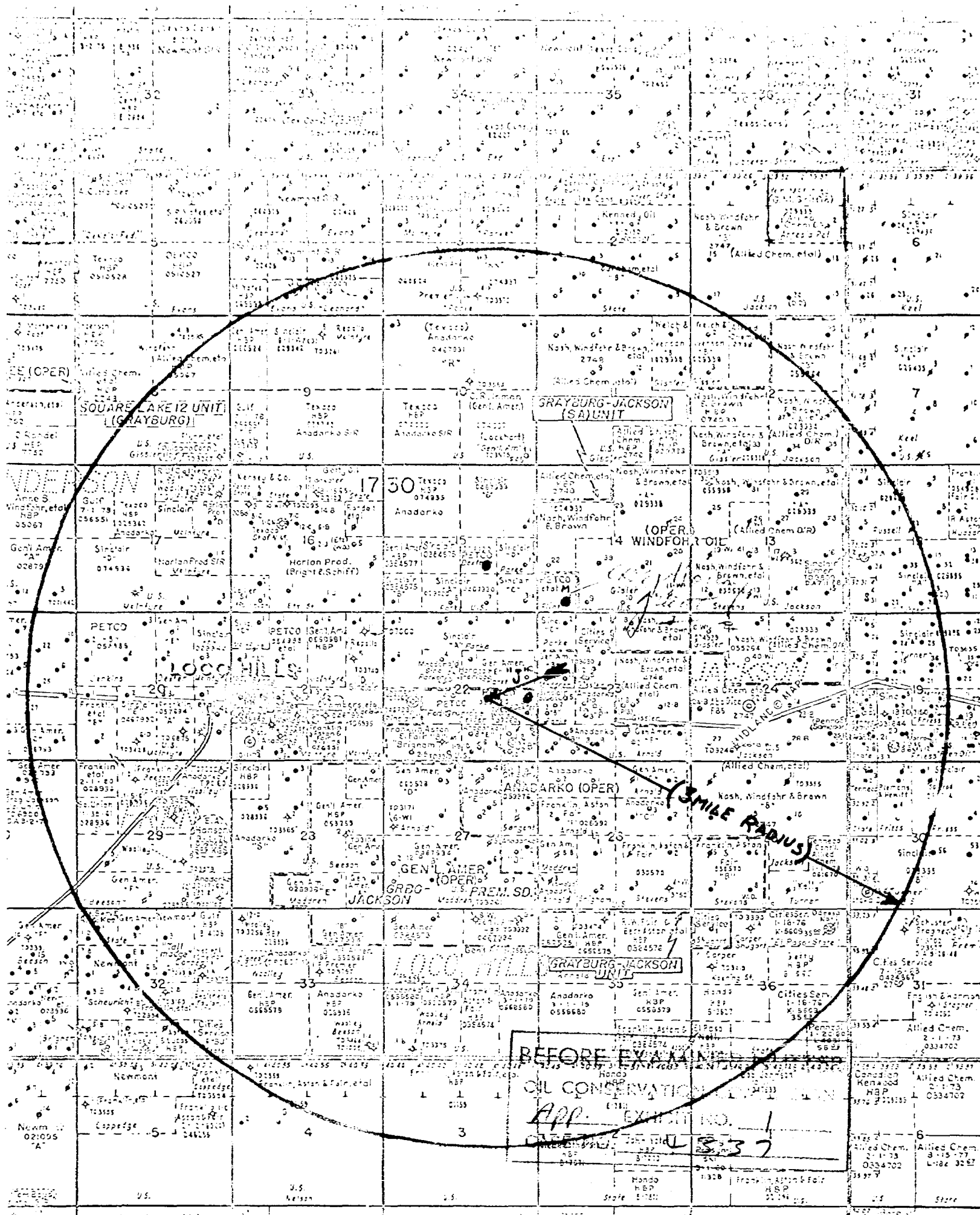


A. L. PORTER, Jr., Member & Secretary



esr/





DEXTER FEDERAL NO. 1-J  
J, 2310 FSL, 1050 FEL, Sec. 22, T-17S, R-30E  
Eddy County, New Mexico

FORMATION RECORD

FROM	TO	TOTAL FEET	FORMATION
0	50	50	Alluvium with some Red Beds exposed at surface
50	340	290	Red Beds & Anhydrite stringers (Dockum Group)
340	420	80	Anhydrite
420	1155	735	Nearly solid salt w/ some Anhydrite & Red Bed streaks
1155	1350	195	Anhydrite, some Red Shale
1350	2300	950	Anhydrite, Red Shale & Sand, & Dolomite
2300	2730	430	Sand, Shale & Anhydrite
2730	3100	370	Dolomite & Sand
3100	4550	1450	Dolomite
4550	6650	2100	Dolomite, Sand, Grn. Shale & Blk. Shale
6650	6900	250	Dolomite & Grn. Shale
6900	6997	97	Reef Dolomite

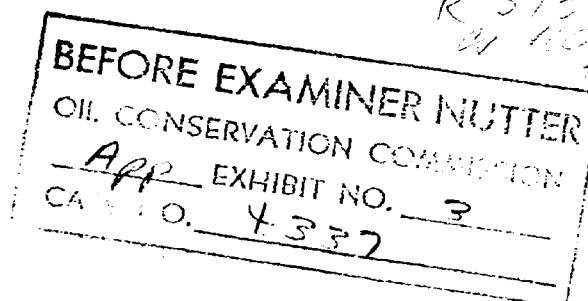
Cable tools were used from 0 feet to 1415 feet.  
Rotary tools were used from 1415 feet to 6997 feet.

The above Formation Record is based on the attached GR/Acoustic Log. Also GR/Neutron Logs and sample descriptions of the following wells:

Flint "B" No. 1, Section 14-17-30, Eddy County, New Mexico — *excepted*  
Dexter No. 1-15, Section 15-17-30, Eddy County, New Mexico  
Dexter No. 3, Section 22-17-30, Eddy County, New Mexico

*Order No K-3812*  
*no 4179*  
*Aug 14, '69*

*Dexter Fed # 1-5*  
*mineral prod. present*  
*test: 19 bopd, 100 imp*  
*test 25 bopd to haul*  
*and dispose of wh.*



PETROLEUM COMPOSITION OF TEXAS

Dexter Federal 1-1 Lease

Loco Hills, New Mexico

April 3, 1970

INTRODUCTION:

Gentlemen: A sample of water has been forwarded to our laboratory for analysis, requesting that we report on the Probable Mineral Composition of this water and our recommendation for treatment.

TESTS:

Total Solids -----	2,160	Mg/L
pH -----	7.20	
Iron (Fe) -----	.10	Mg/L
Calcium Bicarbonate ( $\text{CaHCO}_3$ )-----	290	Mg/L
Calcium Sulfate ( $\text{CaSO}_4$ )-----	140	Mg/L
Calcium Chloride ( $\text{CaCl}_2$ )-----	220	Mg/L
Magnesium Chloride ( $\text{MgCl}_2$ ) -----	160	Mg/L
Sodium Chloride ( $\text{NaCl}$ ) -----	1,350	Mg/L

GENERAL EVALUATION:

This is actually a sour fresh type water, which is typical of that area. It has a high saturation of Bicarbonate, and will precipitate a Calcium Bicarbonate Scale. We also wish to advise that should any air be allowed to enter this well, you will have a highly corrosive action.

CHEMICAL RECOMMENDATION:

We would recommend that our Formula CO-710-S be used for the prevention of solids precipitation. Our chemical recommendation would be a five-gallon slug into the annular space of this well and circulated if possible, with a chemical program of two quarts twice weekly introduced in the same manner, being very sure to follow the chemical with enough fluid from the bleeder to insure that it arrives at the fluid level.

BEFORE EXAMINER NUTTER	
OIL CONSERVATION COMMISSION	
APR	EXHIBIT NO. 4
CASE NO.	4337

STEPHENSON, CAMPBELL & OLMSTED

ATTORNEYS AT LAW

DONNAN STEPHENSON  
JACK M. CAMPBELL  
CHARLES D. OLMSTED  
HARRY S. CONNELLY, JR.  
BOB BARBEROUSSE

PADRE GALLEGOS HOUSE  
231 WASHINGTON AVENUE  
P. O. BOX 877  
SANTA FE, NEW MEXICO 87501  
TELEPHONE 982-3596  
AREA CODE 505

70 APR 7 AM 8 12

April 6, 1970

Case 4337

ma

Oil Conservation Commission  
Land Office Building  
Santa Fe, New Mexico 87501

Re: New Mexico Oil Conservation Commission Case No. 4337

Gentlemen:

On behalf of Petroleum Corporation of Texas, we are herewith requesting a continuance of the captioned matter from the April hearing to the May hearing which we understand from Ida Rodriguez is tentatively scheduled for May 13, 1970.

This application has only very recently been submitted, and it would be appreciated if it could be heard in May in order that adequate preparation may be made.

Very truly yours,

Jack M. Campbell  
Jack M. Campbell

JMC:lb

cc - Mr. Ken Freeman  
Petroleum Corporation of Texas  
100 V & J Tower  
Midland, Texas 79701

DOCKET MAILED

4-30-70

AM 6 18  
70 MAR

PETROLEUM CORPORATION OF TEXAS

1000 V & J TOWER  
MIDLAND, TEXAS 79701

March 13, 1970

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

RE: Application of Petroleum  
Corporation of Texas For An  
Exception To Order No. R-3221,  
As Amended, Eddy County,  
New Mexico

Dear Sir:

We are requesting a hearing to be scheduled for an exemption to the  
Commission No Pit Order for our Dexter Hanagan Garridge Federal No.  
1-(J) located in the NW/4 of the SE/4 Section 22, T-17S, R-30E, Eddy  
County, New Mexico.

We will submit water analyses, well tests, lease plats and all other  
pertinent information at the hearing. If you need any additional  
information prior to scheduling a hearing date, please advise.

Yours very truly,

PETROLEUM CORPORATION OF TEXAS

*K. A. Freeman*

K. A. Freeman  
District Superintendent

KAF:ph

DOCKET MAILED

Date 4-2-70

DRAFT

GMH/esr

BEFORE THE OIL CONSERVATION COMMISSION  
OF THE STATE OF NEW MEXICO

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

CASE No. 4337

Order No. R-3966

APPLICATION OF PETROLEUM CORPORATION  
OF TEXAS FOR AN EXCEPTION TO ORDER  
NO. R-3221, AS AMENDED, EDDY COUNTY,  
NEW MEXICO.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on May 13, 19670,  
at Santa Fe, New Mexico, before Examiner Daniel S. Nutter.

NOW, on this \_\_\_\_\_ day of May, 19670, 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, Petroleum Corporation of Texas, is  
Federal  
the owner and operator of the Dexter Hanagan Graridge/Well No. 1,  
located in Unit J of Section 22, Township 17 South, Range 30 East,  
NMPM, Jackson-Abo Pool, Eddy County, New Mexico.

(3) That Order (3) of Commission Order No. R-3221, as  
amended, prohibits, in that area encompassed by Lea, Eddy, Chaves,  
and Roosevelt Counties, New Mexico, the disposal, subject to minor  
exceptions, of water produced in conjunction with the production  
of oil or gas, or both, on the surface of the ground, or in any  
pit, pond, lake, depression, draw, streambed, or arroyo, or in  
any watercourse, or in any other place or in any manner which

would constitute a hazard to any fresh water supplies and said disposal has not previously been prohibited.

(4) That the aforesaid Order No. R-3221 was issued in order to afford reasonable protection against contamination of fresh water supplies designated by the State Engineer through disposal of water produced in conjunction with the production of oil or gas, or both, in unlined surface pits.

(5) That the State Engineer has designated, pursuant to Section 65-3-11 (15), N.M.S.A., 1953 Compilation, all underground water in the State of New Mexico containing 10,000 parts per million or less of dissolved solids as fresh water supplies to be afforded reasonable protection against contamination; except that said designation does not include any water for which there is no present or reasonably foreseeable beneficial use that would be impaired by contamination.

(6) That the applicant seeks an exception to the provisions of the aforesaid Order (3) to permit the disposal of salt water produced by applicant's aforesaid Dexter Hanagan Graridge Federal Well No. 1 in an unlined surface pit in the vicinity of said well.

(7) ~~that the subject water~~  
that there appears to be no shallow fresh water in the vicinity of the subject pit for which a present or reasonably foreseeable beneficial use is or which be made that would be impaired by contamination from the subject pit.

(8) That the applicant should be permitted to dispose of ~~that~~ <sup>said</sup> water produced by ~~the~~ <sup>said</sup> Dexter Hanagan Graridge Federal well No. 1 in an unlined surface pit located in the vicinity of said well.

IT IS THEREFORE ORDERED:

(1) That the applicant, Petroleum Corporation of Texas, is hereby granted an exception to Order (3) of Commission Order No. R-3221, as amended, to dispose of water produced in conjunction with the production of oil or gas, or both, by its Dexter Hanagan Graridge Federal Well No. 1, located in Unit J of Section 22, Township 17 South, Range 30 East, NMPM, Jackson-Abo Pool, Eddy County, New Mexico, in an unlined surface pit located in the vicinity of said well.

(2) That the Secretary-Director of the Commission may by administrative order rescind such authority whenever it reasonably appears to the Secretary-Director that such rescission would serve to protect fresh water supplies from contamination.

(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.