SO Replication, Transcript, Small Exhibits, Etc.

OIL CONSERVATION COMMISSION P. O. BOX 671 SANTA FE, NEW MEXICO

August 15, 1955

Mr. John P. McNaughton Neville G. Penrose, Inc. Fair Building Fort Worth 2, Texas

Re: Case No. 888, Order No. R-660

Dear John:

Reference is made to your letter of August 12 pertaining to the above-captioned case and order pertaining to the Caprock-Queen Oil Pool. I certainly realize your position in this matter and if there had been any way which we could have named this pool the Drickey-Queen, we would have taken that course. However, for many years this Commission has been confronted with the problem of naming pools after living persons, and several years ago a very heated controversy arose over this matter. At that time it was deemed advisable to refrain from naming any pool after a living person who is in the oil industry.

We have attempted to name pools after ranchers owning surface rights in the area to give them a little recognition. When the original Drickey-Queen Pool was named a year or so ago, it was the Commission's thought that the name Drickey was the name of a rancher in the area. Had we known that Mr. Drickey was affiliated with the industry, the pool would never have received his name. We get numerous requests to name pools after people in the industry, but we refrain from doing so solely to avoid any serious controversy. I feel sure that in the event the Commission ever changes its rule, the Caprock-Queen name could be changed to include Mr. Drickey's name.

Sincerely,

W. B. Macey Secretary - Director

WBM:brp

NEVILLE C. PENROSE, INC. FAIR BUILDING FORT WORTH 2, TEXAS

August 12, 1955

Mr. W. B. Macey, Member and Secretary New Mexico Oil Conservation Commission Santa Fe, New Mexico

Re: Case #888 - Order #R-660

Dear Bill:

Several days ago we received copy of Order R-660 in which the consolidated Queen pools in east Chaves County were to be designated as the "Caprock-Queen" Pool. You will recall that at the hearing in Santa Fe when case #888 was called I discussed this matter with you and furnished for the record a copy of our letter to you recommending that the name "Drickey" be retained in the consolidation of the four pools concerned. As I recall, Mr. S. J. Stanley, testifying for the Commission, stated that he had no objection to the name "Drickey" being retained in the field name. So far as I know there were no other objections, and in fact, no suggestions that it be named other than the Drickey-Caprock Pool.

First of all I would like to state that we do not anticipate registering a formal objection to the Order R-660 as it is written; however, I would like to state that we are disappointed that the Commission has seen fit to eliminate the name of the man who is largely responsible for the discovery of the Drickey-Queen Field from the final field designation. We, of course, realize that many things must be taken into consideration such as topographical features, etc., in designating fields; however, it is our opinion that it would be to the State of New Mexico's advantage to give some recognition to the people who are endeavoring to find more oil both for themselves and for the State and that certainly a very simple manner giving this recognition would be naming the fields after the ones who have done the most work.

We, of course, do not know what objection there might have been to naming the field for Mr. Paul Drickey, but in a way, it seems to us about like giving a man a medal and then sometime later taking it away from him. As I stated in the beginning, we have no intention of registering a formal protest, but inasmuch as this is a matter which in some small way affects the discovery and development of oil pools in New Mexico, it should be brought to your attention.

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Very truly yours, John P. McNaughton

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BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE HEARING CALLED BY THE GIL CONSERVATION COMMISSION FOR THE PURPOSE OF CONSIDERING:

> CASE NO. 888 Order No. R-660

THE APPLICATION OF THE COMMISSION ON ITS OWN MOTION FOR AN ORDER (a) CONSOLIDATING THE NORTH CAPROCK-QUEEN OIL POOL, THE CAPROCK OIL POOL, THE DRICKEY-QUEEN OIL POOL AND THE SOUTH DRICKEY-QUEEN OIL POOL INTO A SINGLE OIL POOL TO BE KNOWN AS THE CAPPOCK-QUEEN OIL POOL AND (b) ESTABLISH-ING POOL RULES FOR THE PROPOSED CAPROCK-QUEEN OIL POOL.

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on April 20, 1955, at Santa Fe, New Mexico, before the Oil Conservation Commission, hereinafter referred to as the "Commission".

NOW, on this $111^{\pm 4}$ day of July, 1955, the Commission, a quorum being present, having considered the record and the testimony adduced, and being fully advised in the premises,

FINDS:

(1) That due notice of the time and place of hearing and the purpose thereof having been given as required by law, the Commission has jurisdiction of this cause and the subject matter thereof.

(2) That the North Caprock-Queen Oil Poel, the Caprock Oil Pool, the Drickey-Queen Oil Pool, and the South Drickey-Queen Oil Pool, as such pools are presently defined by the Commission, are producing from the same common source of supply, that being the Queen formation; therefore the aforementioned pools should be consolidated to form a single oil pool to be known as the Caprock-Queen Oil Pool.

(3) That, in order to prevent waste, it is necessary to establish a limiting gas-oil ratio for oil wells producing from within the horizontal and vertical boundaries of said oil pool.

(4) That, in order to prevent the dissipation of reservoir energy, it is necessary to define a gas well in the Caprock-Queen Oil Pool and to provide for the regulation of production from such wells. Order No. R-660

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(5) That, in order to protect potable waters in the area, it is necessary to adopt special rules pertaining to the casing program for wells to be drilled in the Caprock-Queen Gil Pool, and that such special rules for the casing program in the Caprock-Queen Oil Pool have been formulated and presented in a directive issued by the Commission on September 1, 1954.

IT IS THEREFORE ORDERED:

That the application of the Commission on its own motion be, and the same hereby is approved as hereinafter set out:

(1) That the North Caprock-Cueen Oil Pool, the Caprock Oil Pool, the Drickey-Cueen Oil Pool and the South Drickey-Cueen Oil Pool, as such pools are presently defined by the Commission, be, and the same hereby are abolished.

(2) That there is hereby created an oil pool, designated as the Caprock-Queen Oil Pool, established as an oil pool producing from the Queen formation and the horizontal boundaries as set out in Exhibit "A", attached hereto and made a part hereof.

(3) That a limiting gas-oil ratio for oil wells in the Caprock-Cueen Oil 2001 be, and the same hereby is established at 2,000 cubic feet of gas per barrel of oil. The provision of this paragraph shall become effective on the first day of August, 1955.

(4) That a gas well in the Caprock-Queen Oil Fool shall be defined as any well producing with a gas-oil ratio in excess of 80,000 cubic feet of gas per barrel of stock tank oil.

(5) That any well in the Caprock-Queen Oil Pool classified as a gas well under provision (4) above, shall be shut in until further order of the Commission.

(6) That the casing requirements for the Caprock-Queen Oil Pool as presented in the Commission Directive of September 1, 1954 shall be adopted, and further all Commission Rules and Regulations presently in force and those that may be adopted in the future shall apply where applicable.

(7) That gas-oil ratio tests shall be conducted annually on all oil wells in the Caprock-Queen Oil Pool during the month of May, and that the results thereof shall be reported to the Commission on Form C-116 on or before the fifteenth (15th) day of June of each calendar year. Such tests shall be made in accordance with the provisions of Commission Rule 301.

(8) That on all wells completed or recompleted in the Caprock-Queen Oil Pool it shall be required that a C-104 with the wells initial potential test submitted thereon be filed in accordance with Rule 1107 of the Commission's Statewide Rules and Regulations; further, a gas-oil ratio test shall be performed in conjunction with the initial potential test and submitted on Form C-116 along with the C-104. Further, it shall be required that each operator shall take a gas-oil ratio test not sooner than 30 days nor later than 60 days following the completion or recompletion of an oil well in the Caprock-Queen Oil -3.. Order No. R-660

Pool and the results of such test shall be reported on Form C-116 and performed in accordance with provisions of Rule 301 of the Commission's Statewide Rules and Regulations.

(9) That any well completed prior to January 1, 1951 shall be exempt from the provisions of (7) above; however, gas-oil ratio tests on such wells may be required from time to time by the Commission.

PROVIDED FURTHER, That the above rules, in addition to such of the general rules and regulations of the Commission as are not in conflict therewith, be, and the same hereby are adopted to govern the drilling, completion and operation of all wells in the Caprock-Queen Oil Pool of Lea and Chaves Counties, New Mexico.

EXHIBIT "A"

Horizontal limits of the Caprock-Cueen Oil Pool:

TOWNSHI	IP 12 SOUTH, RANGE 32 EAST, NMPM
Sec. 1:	SW/4
Sec. II:	5/2
Sec. 12:	W/2
Sec. 13:	W/2
Sec. 14:	A11
Sec. 15:	A11
Sec. 16:	A11
Sec. 17:	A11
Sec. 19:	E/2
Sec. 20:	A11
Sec. 21:	
Sec. 22:	
Sec. 23;	N/2
Sec. 29:	All
Sec. 30:	All
Sec. 31:	All
Sec. 32:	All
TOWNSHI	P 13 SOUTH, RANGE 31 EAST, NMPM
Sec. 1:	All
Sec. 2:	A11
Sec. 11:	A11
Sec. 12:	A11
Sec. 13:	A11
Sec. 14:	A11,
Sec. 15:	E/2
Sec. 22:	A11
Sec. 23:	A11
Sec. 24:	A11
Sec. 25:	A 11
Sec. 26:	A)1
Sec. 27:	A11
Sec. 33:	E/2 and $E/2$ $W/2$
S ec. 34:	All
Sec. 35:	All
Sec. 36:	A11

Order No. R-660

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Exhibit 'A' continued

TOWNSH	IP 13 SOUTH, RANGE 32 EAST, NMPM
Sec. 5:	All
Sec. 6;	A11
Sec. 7:	A11
Sec. 8:	A11
Sec. 17:	A11
Sec. 18:	All
Sec. 19:	A11
	W/2, NE/4
TOWNSHI	P 14 SOUTH, RANGE 31 EAST, NMPM
Sec. 2:	All
Sec. 3:	A11
Sec. 4:	E/2
Sec. 9:	
Sec. 10:	A11
Sec. 11:	
Sec. 14:	
sec. 15:	A11
Sec. 16:	A11
Sec. 21;	A11
Sec. 22:	A11
Sec. 27:	
Sec. 28:	
Sec. 32:	E/2
Sec. 33:	All
Sec. 34:	W/2, NE/4
	P 15 SOUTH, RANGE 31 EAST, NMPM
Sec. 4:	W/2, NE/4
Sec. 5:	A11
Sec. 7:	E/2
Sec. 8:	A11
Sec. 9:	NW/4
~ ~ ~	

Sec. 7: E/2Sec. 8: All Sec. 9: NW/4Sec. 17: All Sec. 18: E/2Sec. 19: E/2Sec. 20: W/2Sec. 29: NW/4Sec. 30: All

designated.

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

STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

SIMMS, ÍÒHN F. Chairman ke Member W. B. MACEY, Member and Secretary

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BEFORE THE **Oil Conservation Commission** SANTA FE, NEW MEXICO April 20, 1955 IN THE MATTER OF: 888 - Recular Hearing CASE NO. TRANSCRIPT OF PROCEEDINGS ADA DEARNLEY AND ASSOCIATES COURT REPORTERS 605 SIMMS BUILDING TELEPHONE 3-6691 ALBUQUERQUE, NEW MEXICO

T. 379/2020 - 0011 - 5		
BEFORE THE OIL CONSERVATION COMMISSION Santa Fe, New Mexico 'April 20, 1955		
IN THE MATTER OF:		
The application of the Oil Conservation Commission upon its own motion for an order		
(a) Consolidating the following oil pools in Lea and Chaves Counties, New Mexico:		
North Caprock-Queen Pool; Caprock Pool; Drickey-Queen Pool; South Drickey-Queen Pool; into one pool, to be designated the Caprock-Queen Pool and to include the following-described acreage:		
NEW MEXICO PRINCIPAL MERIDIAN	Case No. 888	
Twp. 12 South, Rge. 32 East SW/4 Section 1; S/2 Section 11; W/2 Section 12; W/2 Section 13; all of Sections 14, 15, 16 and 17; E/ 2 Section 19; all of Section 20; N/2 Section 21; N/2 Section 22; N/2 Section 23; all of Sections 29, 30, 31 and 32		
Twp. 12 South, Rge. 31 East) All of Section 36		
Twp. 13 South, Rge. 31 East All of Sections 1, 2, 11, 12, 13 and 14; E/2 Section 15; all of Sections 22,23, 24, 25,26 and 27; E/2 Section 33; all of Sections 34, 35 and 36		
Twp. 13 South, Rge. 32 East All of Sections 5,6,7, 8, 17, 18 and 19;) W/2 Section 30; W/2 Section 31		

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A Yes, sir, I am. (Marked Commission's Exhibit 1 for identification.) Q In that connection I believe you have prepared an exhibit that has been marked Exhibit 1 in this case?

A Yes, sir, I have.

Q Will you proceed to that Exhibit and explain that, please?

A Exhibit No. 1 reflects the present boundary of four pools. Outlined in red is the North Caprock Pool, outlined in blue is the Caprock Pool, outlined in green is the present boundary of the Drickey-Queen Pool and outlined in purple is the present boundary of the South Drickey-Queen Pool.

Exhibit No. 1 also shows a contour map on top of the Queen with the contour interval of ten feet. This information was obtained from Commission files, electrical and gamma ray log data, and information supplied by the operators wherever it was requested. There are a few gaps in the trand, due to non-development.

- Q What trend?
- A In the Caprock trend.
- Q All right.

A There are a few gaps in the Caprock trend, due to non-development. This is especially true in the area of Sections 28, 28, Township 14 South, Range 31 East, and also in the area of Sections 19, 20, 29 and 30 in Township 12 South, Range 32 East. However, the trend, that is the Caprock trend persists and that the entire area is, I believe, connected as one pool as Exhibit No. 1 indicates. Therefore, it is recommended that the entire area colored in yellow as defined by the advertisement in this case, be consolidated into one pool.

In addition to the advertised pool boundary, it is recommended

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that additional contiguous acreage be included, namely the northeast quarter of Section 30, Township 13 South, Range 32 Jast. It must have been noted that the north half was advertised as an extension to the Caprock Pool in the March nomenclature cases. That is the north half of Section 30. However, the present proposed boundary in Case 888 incorporates only the west half. Therefore, to be in accord with the original proposed recommendations in the nomenclature cases, it is recommended that the northeast quarter 1.1.11 of Section 30, Township 13 South, Range 32 East be included. The 0.1. Caprock trend presents a very interesting problems which are not encountered in the original Caprock Pool, as development extended southward into the Drickey-Queen and South Drickey-Queen Pools as presently defined by the Commission, certain gas areas were encountered in a number of wells. This usually occurs up-dip and on the western flank of the Caprock trend.

More specifically, gas was encountered in the Joseph O'Neil, Junior Well. The Elizabeth A Williams No. 1, the northwest quarter of the northwest quarter of Section 33, Township 14 South, Range 31 East, the top of the Queen was found to be at 2,900 feet. From Commission files we have the following date, drill-stem test No. 1 in the Queen interval from 2,897 to 2,926, shows that they recovered a fair blow of air for four minutes, followed by gas flow, no fluid.

Drill-stem test No. 2, from 2877 to 2926, open two and a half hours, flowed 7,126,000 cubic feet of gas per day. Flowing pressure was from zero to 1,000 pounds; fifteen minute shut-in was 1,000 pounds. Analysis of the gas showed it to be 64 percent nitrogen and the remainder methane. It had a very low BTU content. The well was plugged and abandoned.

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Another well, that is Well No. 2 was the Morris R. Antwell Federal Yates No. 1, the southwest quarter of the northeast quarter of Section 33, Township 14 South, Mange 31 Sast. They set six-incl oil string at 3,076 feet with 100 sacks, drilled out to three thousand eighty-four and a half feet, recovered 7,500,000 cubic feet of gas per day. The gas analysis, there was no gas analysis, excuse me. However, the gas was believed to have the same characteristics as the Joseph T. O'Neal, Junior, Elizabeth A. Williams No. 1 Well. Operator perforated pipe from 3,079 to 3,083 after setting a liner, but failed to shut off the gas. There was no trace of oil and the well is presently shut-in.

Another high gas-oil ratio well was the Cities Service Government D No. 1 in the southeast quarter of the northeast quarter of Section 33, Township 13 South, Range 31 East. This well is approximately six miles north of the two wells previously read into the record. The top of the Queen is 2,810 feet. Five and a half inch casing set at 2,867; total depth was 3,147. However, operator did not drill out the cement plug. Perforated pipe from 2,820 to 2,830, with the top of the Queen, of course, at 2,810. Operator proceeded to sand oil frac with eight thousand gallons of oil and four thousand pounds of sand, recovered a load oil and tested approximately 95 barrels of oil per day; 37 degree gravity, with a gasoil ratio of 21,500 to 1.

Another gas well, or well with a high gas-oil ratio was the Sinclair Oil and Gas Company's Federal Saner No. 2 in the northwest quarter of the southwest quarter in Section 8, Township 15 South, Range 31 East. The top of the Queen is 3,070 feet. This well has a high gas-oil ratio in excess of 25,000 to 1. The oil

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production is estimated at four barrels per hour. I believe that future development will result in many more wells completed with high gas-oil ratios in the Caprock trend. I have heard it argued that the gas may be isolated from the reservoir by occurring in pockets. However, two wells have been situated with a gas-oil contacted. namely the Cities Service Government D-1 and the Sinclair Federal Saner No. 2.

Further, I believe that most of the operators are of the opinion that this occurrence of gas is directly connected to the reservoir, and that it may be a source of energy for greater ultimate recovery from oil. Therefore, I recommend that the entire Caprock trend have a gas-oil limit of 2,000 to 1 with respect to the casing program.

Q Let me ask you a question here. Each of the four pools, as designated on that map, they are vertical boundaries or the formation is the Queen and the Queen only, is that right?

A Yes, sir, that is correct.

Q You recommend that this new pool, which you propose also, that the Queen be the vertical delineation and only the Queen?

A Yes, sir, producing from the Queen formation.

Q All right.

A A study pertaining to casing requirements in the Drickey Pool was conducted last year. That is in 1954. This study was made by Jack Frost with the United States Geological Survey in Artesia, and also by the Commission Staff.

I wish to read into the record an outline of the casing program distributed by the United States Geological Survey to all operators holding Federal leases, that the minumum casing program to be approved by the State and Federal regulatory bodies would be a surface

string to be set and cemented in the top of the red-beds, at approxi-ADA DEARNLEY & ASSOCIATES STENOTYPE REPORTERS ALBUQUERQUE, NEW MEXICO TELEPHONE 3-6691

300 feet, and a production string to be cemented with not less than a hundred sacks of cement, preceded by mud, circulated back to the surface; and/or in lieu of cementing the surface string, the production string to be two-stage, with not less than 50 sacks on bottpm and 50 sacks at the top of the salt. Here is the casing program as outlined by the Commission Staff.

MR. KITTS: You wish to mark that as an exhibit?

(Marked Commission's Exhibit No. 2, for identification.)

Q Did you assist in the preparation of that?

A Yes. "September 1, 1954. Directive to: All Operators in the Drickey-Queen Area. From: Oil Conservation Commission-Hobbs-S. J. Stanley, Engineer. Subject: Casing Program in the Drickey-Queen Area. The New Mexico Oil Conservation Commission has completed a study of the Drickey-Queen area pertaining to a casing program for the protection of potable waters and the isolation of the salt section. Hereafter, wells drilled in this area shall set pipe as follows:

AREA 1 - WELLS DRILLED ON TOP OF THE CAPROCK

Surface pipe must be set and sufficient cement used to circulate to the surface. The surface pipe must be set at a sufficient depth to penetrate the red-bed section. Geological correlation of the red-bed section on top of the Caprock is approximately 265 ft., therefore surface pipe must be set at a minimum approximate depth of 257 to 300 ft.

AREA 2 - WELLS DRILLED BELOW THE CAPROCK

(1) Surface pipe must be set and sufficient cement used to circulate to the surface. The surface pipe must be set at a sufficient depth to penetrate the red-bed section. Geological ADA DEARNLEY & ASSOCIATES

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correlation of the top of the red-bed section below the Caprock is approximately 145 ft., therefore the surface pipe must be set at a minimum approximate depth interval of 155 to 180 ft.

(2) in Lieu of Paragraph (1) above, the operator may exclude the setting of surface pipe below the Caprock provided that:

(a) In cementing the oil string the operator will use sufficient cement to completely cover the salt section or utilize a two-stage cementing tool with a minimum of 50 sax around the bottom of the casing and 50 sax at the top of the salt, or,

(b) In the absence of setting surface pipe as outlined in sub-paragraph above, the operator in addition will state on Form C-103 that there is no surface water in the immediate area of the location, occasioned by the Drilling of a dry water well."

As a result of the drilling of gas wells, since the casing requirements were written, I have changed my idea of surface pipe requirements in a pool, since gas wells have been eccountered below the Caprock, and in an area where there is possibly no surface water it is possible that in drilling of a well the surface pipe could be included in the casing program of the well.

Secondly, an economic factor is involved in the setting of an oil string, whereby Mr. John Doe, the operator, has decided to penetrate the Queen pay formation to determine the economic feasibility of running an oil string. A blow-out can occur and they have occurred in the Drickey-Queen area, in the absence of any pipe in the hole, or by landing a cable tool string, for the protection of

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ADA DEARNLEY & ASSOCIATES STENOTYPE REPORTERS ALBUQUERQUE, NEW MEXICO TELEPHONE 3-6691 water, that would require uncontrollable factors. Face-by, it could result in damage to the reservoir.

I wish to reiterate my recommendations. First, one main pool as advertised in Case 888; secondly, a sus-off ratio limit of 2,000 to 1, and thirdly, surface pipe be required throughout the area.

Q Mr. Stanley, I want to ask you one further question?

A Yes, sir.

Q These wells shown on Exhibit 1, between the present pool boundaries, all of these show Queen production, is that right?

A They show Queen production with the exception of a few wells in this area that may have shown peak production that we have. The area in yellow does show all the present Queen wells. They are engulfed within the boundaries of the yellow area.

Q Will you indicate more specifically the wells you are talking about?

A The advertised portion of Case 888, as outlined in yellow on Exhibit No. 1, there are only two wells outside this particular pool boundaries that are not Queen producers, but were used, mainly to obtain Queen Formation top points for the drawing of the map.

MR. KITTS; That is all.

MR. MACEY: Any questions of the witness?

MR. WALKER: Don Walker for Gulf.

CROSS EXAMINATION

By MR. WALKER:

Q Mr. Stanley, under your proposed 2,000 limit, that we would have a gas limit of 80,000 to a well?

A Yes, sir, if the allowable were 40 barrels a day.

Q In other words, the well can make, assuming 40 barrels, can

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make eight barrels; with ten thousand, two barrels; with forty thousand, or so forth?

A That is correct.

MR. MACEY: Anyone else?

NR. KITTS: We offer in evidence, Exhibits 1 and 2.

MR. MACEY: Without objection the exhibits will be received in evidence. Anything further in this case?

MR. McNAUGHTON: John McNaughton, representing Neville Penrose in Fort Worth. On April 7th, we directed a letter to the Commission's attention regarding our stand in this matter. I believe the original of that letter is in the Commission's hands. I would like to briefly outline the content of this letter in the event there is any question about it.

We have no serious objection to the consolidation of these pools, but we do have a strenuous objection to the elimination of the name "Drickey" from the pool name. As the Commission will recall, the original discovery well in the Drickey Pool was the Penrose-Zimmerman No. 1, located in the northwest quarter northwest quarter, Section 15, Township 14 South, Range 31 East.

This well was drilled on geology that was developed by Mr. Paul Drickey and his associates, R. S. Anderson, Incorporated. And, because of that the pool was named to give him some recognition. This field, of course, is developed far beyond our wildest expectations and I presume those of others in the area. We feel that this recognition should be continued, as I previously stated, although we have no objection to the consolidation of these fields, we do not think it is necessary at this time. But, if it so please the Commission to effect this consolidation, we would like for the name

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"Drickey" to remain.

If, again, it is not proper to call the whole field the Brickey-Field, then we would like to see it called the Brickey-Caprock, or some such similar name.

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In regard to the gas-oil ratio, we have no objection to the gasoil ratio limit as suggested by Mr. Stanley in regard to the casing program, although we are not in entire agreement with the necessity for setting surface pipe, we have no objections to setting it as he suggested.

MR. MACEY: Anyone else?

MR. REIDER: I would like to have Mr. Stanley on the stand. By MR. REIDER:

Q I believe there was no provision made for no no-flare provisions in this field rule?

A I overlooked that point. I wish to recommend a no-flare order in this particular area.

I would also request to the Commission that I withdraw Exhibit'No. 2, place it on the brown line so that prints can be made, and the operators pay for the prints at Hobbs, New Mexico. We have had numerous requests for that map.

MR. MACEY: Exhibit 2 or 1?

A Exhibit 1.

MR. MACEY: I am not sure I understood what you said about the no-flare rule.

A We do have, actually. I recommend 2,000 to 1 gas-oil ratio in the pool. We do have some dry gas whether it be nitrogen or methane, I recommend that the dry gas not be blown to the atmosphere. Therefore, I recommend a no-flare order for the pool.

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MR. MACHY: If you have a no-flare order for the pool, they are not tied to a gasoline plant --

A No, sir.

MR. MACEY: What are they going to do?

A Pertaining to the dry gas wells, could they blow them off?

MR. MACEY: No, but you said for the pool?

A I am sorry, I will retract that statement.

MR. MACEY: What you are trying to say is that a completed dry gas well on the reservoir should not be allowed to --

A (Interrupting) Be blown to the atmosphere. However, theoretically, with a 2,000 to 1 ratio, and an operator producing a little bit of oil, he could blow that amount of gas to the atmosphere, equal to 80,000 to 1. That is the complication.

MR. MACEY: Anyone have a questions of Mr. Stanley? MR. DUREE: My name is Jack Duree, with Pure Oil Company.

By MR. DUREE:

Q Mr. Stanley, about what does the ratio run on most of the wells throughout the Queen sand, wells, including these exceptional wells that you have brought out?

A They are of a low order, generally too small to measure.

Q Would you say somewhere in the 200 foot range?

A Yes, sir, I would say that.

MR. MACEY: Mr. Stanley, have theyestablished a gas-oil contact to a certain datum, is it irregular?

A I think it may be regular. Usually I think that the gas-oil contact, the rule of the thumb is plus 1,400 feet. However, gas has been encountered at lower depths. However, there could be discrepancies in elevation, due to sudden drop-off the Caprock

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and it could be that the gas-oil contract is irregular throughout the entire trend.

MR. MACEY: Anyone else? If not the witness may be excused. (Witness excused.)

MR. MACEY: I have a telegram from Morris R. Antweil, addressed to the Commission. "We urge Commission to adopt name of Drickey-Queen for entire area. We feel it is wasteful to cover salt section with cement. Will accept Commission's recommendation within reason, Signed: Morris R. Antweil." Telegram is dated April 15th.

Anyone have anything further?

MR. WALKER: Don Walker, with Gulf. I am sorry that I didn't know about this until this morning. Possibly I didn't read my mail close enough. I would like to have this held over long enough to give my management a chance to talk about it. I am reasonably sure we have no objection, but I would like to have the privilege of getting in a letter stating our position.

MR. MACEY: Will 20 days be sufficient?

MR. WALKER: Yes, sir.

MR. MACEY: Anyone else?

MR. DUREE: May we ask for the same thing?

MR. MACEY: Yes, sir. Anyone has an opportunity to submit any statement or proposal they wish to make in this case within the next 20 days.

If nothing further, we will take the case under advisement. MR. McNAUGHTON: May I make the request that those statements be furnished to the other operators in the field? If they are going to submit statements, as long as they have no objections there would be no question about it, if they have objections my company would

> ADA DEARNLEY & ASSOCIATES STENOTYPE REPORTERS ALBUQUERQUE, NEW MEXICO TELEPHONE 3-6691

like to know what they are.

MR. MACHY: Would you furnish him with a copy of the letter please?

MR. WALKER: Yes.

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

I, ADA DEARNLEY, Court Reporter, do hereby certify that the foregoing and attached transcript of proceedings before the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, is a true and correct record to the best of my knowledge, skill and ability.

IN WITNESS WHEREOF I have affixed my hand and notarial seal this 30th day of April, 1955.

Notary Public, Court Reporter

My Commission Expires: June 19, 1955

> ADA DEARNLEY & ASSOCIATES Stenotype reporters Albuquerque, New Mexico Telephone 3-6691

Hor.

NEW MEXICO OIL CONSERVATION COMMISSION BOX 2045 HOBBS, NEW MEXICO

April 27, 1955

SUBJECT: POSTPONEMENT OF GAS OIL RATIO TESTS IN THE DRICKEY QUEEN POOL TO: ALL OPERATORS IN THE DRICKEY QUEEN AREA

Pending the outcome of Case #888 which was heard April 20,1955, proposing the consolidation of the Caprock, Drickey Queen, South Drickey Queen and North Caprock pools, the Gas Oil Ratio Survey scheduled which was to begin May 1,1955 in the Drickey Queen Pool is hereby postponed until further notice.

OIL CONSERVATION COMMISSION

A. L. Porter, Jr. Proration Manager

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ALP/cd

North Ari A Hard Center , A D. f.

SANGHANNE ONL & GARS CADNARANNE

FAIR BUILDING

REDAR'S WOODRAMA , THE AS

P. C.BROOKE vice-presse division manager FLOYD BRETT assistant division manager

April 26, 1955

LOREN WARE DIVISION EXPLORATION SUPT.

U. T. REEVES DIVISION PRODUCTION SUPT.

the sector

R. E. DOSSER DIVISION GAS FIGAS PRODUCTS SUNT

New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Attention: Mr. W. B. Macey

Gentlemen:

Sinclair Oil & Gas Company did not offer any evidence or submit a statement at the regular hearing of Case No. 888 which was concerned with the consolidation of the North Caprock-Queen Pool, Caprock Pool, Drickey-Queen Pool, and the South Drickey-Queen Pool into one pool to be designated the Caprock-Queen Pool, and the establishing of pool rules for the so designated pool.

Sinclair is in accord with the proposed casing program which was offered at the hearing requiring surface casing to the Red Beds and the producing casing to the top of the Queen pay or below with a minimum of 100 sacks of cement. We are also in accord with a limiting gas-oil ratio of 2,000 cubic feet per barrel for the field.

We do object to the proposed no flare rule for the field. Sinclair's producing property in this area is still in the process of being developed. The closest gas gathering system is in excess of fifteen miles from the area and present gas volumes do not justify extension of this gathering line. It is believed that the limiting gasoil ratio provision would provide sufficient control for any high gasoil ratio wells which do exist within the field limits.

Yours very truly,

ou

P. C. Brooke

PCB:CDG:ew cc: Neville G. Penrose, Inc. Att: Mr. John P. McNaughton Fair Building Fort Worth, Texas

Norm

New Mexico OIL CONSERVATION COMMISSION



GOVERNOR JOHN F. SIMMS CHAIRMAN LAND COMMISSIONER E. S. WALKER MEMBER STATE GEOLOGIST W.B. MACEY SECRETARY & DIRECTOR

. . .

% M. B. Macey Gil Conservation Correlation F. C. Fox F71 Santa Fe, New Mexico

Fe: COR tests Caprock and Drickey-Queen

Dear Mr. Macey:

The 1955 Ges Gil Batio survey schedule requires that the tests in the Drickeykueen pool be taken in May and the repults reported on Form C-116 by June 15th. As you know, the wells in the present Caprock pool are exempt from Gas Cil Patio tests. In view of the fact that we propose to combine these pools as a result of the testimony presented at the April hearing, I believe that the curvey period will have to be extended at least through the month of June, in order that the wells now in the Caprock pool may be tested; and it may be neccessary to extend the period further, depending of course, upon the date on which the order is written.

I realize that this case is being held open for twerty days from April 20th, but it was my opinion that you right vent to include the Gas Cil Patio survey period in the order.

Yours very tauly,

WITICE COULSLICE elev A. L. Porter, Jr.

A. L. Porter, Jr. Proration Manager

ALF/hs

VESTERN SYMBOLS DL=Day Letter (15) NL=Night Letter . MAIN OFFICE O LT=Int'l Letter Telegrar VLT=Int'l Victory Lt The filing time shown [1906] 440 line on telegrams and day letters is STANDARD TIME at point of origin. Time of receipt is STANDARD TIME at 1 1 AS2 SSJ 440: 49 L. HBA053 PDEHOBBS NMEX 15 1114ALME 1955 APR 15 AV 11 20 W B MACEY, DIRECTOR NEW MEXICO OIL CONSERVATION COMM SANTA EE NMEXE REQUEST FOLLOWING STATEMENT READ INTO RECORD CASE 888 CAPROCK QUEEN WE URGE COMMISSION TO ADOPT NAME OF DRICKEY QUEEN FOR ENTIRE AREA WE FEEL IT IS WASTEFULTO COVER SALT SECTION WITH CEMENT WILL ACCEPT COLMINSION RECOMMENDATION WITHIN REASONS MORRES R ANTWELLS THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

Car NOm

NEVILLE C. PENROSE, INC. FAIR BUILDING FORT WORTH 2, TEXAS

April 7, 1955

New Mexico Oil Conservation Commission Santa Fe, New Mexico

Attention: Mr. W. B. Macey

Re: Proposed Name Change, Drickey-Queen Pool

Gentlemen:

It has been brought to our attention that at the April 20 hearing in Santa Fe the Commission will present evidence in favor of changing the name of the Drickey-Queen Field to the Caprock-Queen, the idea being that eventually the Caprock and Drickey Pools will merge into one.

We realize, of course, that in many oil provinces it is not unusual to see pools eventually merge, but in some cases they have been allowed to maintain their identity with the boundaries being described by the state regulatory body. In regard to the Drickey Field we feel that some recognition is due to Mr. Paul Drickey and the people with whom he is associated because of the work they did in working up the geology prior to the time the discovery well, the Neville G. Penrose, Inc. Zimmerman #1, was drilled. At the time this wildcat was drilled there was no production within several miles of the area, and there seemed to be no question, of course, that a new oil field had been discovered. The field to date has developed far beyond the limits which were originally expected and, of course, it is possible that it now may actually merge into the southwest part of the Caprock Field; however, the characteristics of the oil production are somewhat different from those in the Caprock Field, and at this time there is considerably more oil being produced from the Drickey-Queen Field than from the Caprock Field.

We are very much in favor of seeing the pool maintain its identity and continue being known as the Drickey-Queen Pool; however, if it seems in the best interest of those concerned, we have no serious objection to consolidating the pools, but if such does take place, we very earnestly feel that the name "Drickey" should be included in some manner in the pool name. A suggested name for a consolidated pool might be the "Drickey-Caprock Pool".

At the hearing in Santa Fe on April 20 it is our further understanding that evidence will be presented to support the present casing program being used in the field. We would like to take this opportunity to go on record as stating that we are in accord with the present regulations governing casing and cementing procedures and do not see the necessity for a change. Previously we have expressed our opinion that it is unnecessary to set surface pipe in many areas of the Drickey Field, and we are still of that accord. At the time our discovery well was drilled our contractor drilled five wells seeking water to drill with and finally found it necessary to truck water in. In view of the absence of water, permission was obtained to set and cement only one string of pipe. Apparently considerable concern was expressed by the U.S.G.S. at this operation, and although we are in complete disagreement with the necessity for setting surface pipe in most instances in this area, we are willing to abide by the present ruling.

Very truly yours,

John P. McNaughton

mb

cc: Mr. S. J. Stanley New Mexico Oil Conservation Commission Hobbs, New Mexico

-2-

New Mexico OIL CONSERVATION COMMISSION

P.O. BOX 2045 HOBBS, NEW MEXICO BEFORE THE OIL CONSTRUCTION OCTAVISSION SMITH FE, NEW COXICO FRHIBIT-NO.

September 1, 1954

DIRECTIVE

GOVERNOR EDWIN L. MECHEM CHAIRMAN LAND COMMISSIONER E.S.WALKER MEMBER

STATE GEOLOGIST R.R.SPURRIER SECRETARY AND DIRECTOR

TO:	All Operators in the Drickey-Queen Area
FROM:	Oll Conservation Commission-Hobbs-S.J.Stanley, Engineer
SUBJECT :	Casing program in the Drickey-Queen Area

The New Mexico Oil Conservation Commission has completed a study of the Drickey-Queen area pertaining to a casing program for the protection of potable waters and the isolation of the salt section. Hereafter, wells drilled in this area shall set pipe as follows:

AREA 1 - WELLS DRILLED ON TOP OF THE CAPROCK

Surface pipe must be set and sufficient cement used to circulate to the surface. The surface pipe must be set at a sufficient depth to penetrate the red-bed section. Geological correlation of the red-bed section on top of the Caprock is approximately 265 ft., therefore surface pipe must be set at a minimum approximate depth of 275 to 300 ft.

AREA 2 - WHLLS DRILLED BELOW THE CAPROCK

(1) Surface pipe must be set and sufficient cement used to circulate to the surface. The surface pipe must be set at a sufficient depth to penetrate the red-bed section. Geological correlation of the top of the red-bed section below the Caprock is approximately 145 ft., therefore the surface pipe must be set at a minimum approximate depth interval of 155 to 180 ft.

(2) In Lieu of Paragraph (1) above, the operator may exclude the setting of surface pipe below the Caprock provided that:

Page 2

- (a) In cementing the oil string the operator will use sufficient cement to completely cover the salt section or utilize a two-stage cementing tool with a minimum of 50 sax around the bottom of the casing and 50 sax at the top of the salt, or,
- (b) In the absence of setting surface pipe as outlined in sub-paragraph above, the operator in addition will state on Form C-103 that there is no surface water in the immediate area of the location, occasioned by the Drilling of a dry water well.

OIL CONSERVATION COMMISSION

Stanley J. Engineer stanley

NOTICE OF PUBLICATION STAPS OF MER MAXIGO OIL CONSEL VATION CONCLUSIO PARTA FE - HE MEXICO

The State of New Foxico by its Oil Concervation Journission hereby gives notice pursuant to law and the cules and negulations of said Counterion promulgated thereundor of the following public learings to be held at 9 o'clock a.m. on April 20, 1955, Habry Hall, State Sepitol, Santa Fe, New Maxico.

STATE OF REAL MEXICO TO:

All named partias and persons having any right, title, interest or claim in the following case, and notice to the public.

CASE 888:

In the matter of the application of the Oil Conservation Commission upon its own motion for an order:

(a) Consolidating the following oil pools in Lea and Chaves Counties, New Mexicor

> North Caprock-Queen Pool; Caprock Pool; Drickey-Queen Pool; South Drickey-Quean Pool

into one pool, to be designated the Caprock-Queen Pool and to include the following-described acreage:

NEM MEXICO PRINCIPAL MERIUIAN

Twp. 12 South, Age. 32 East SW/4 Section 1; S/2 Section 11; W/2 Section 12; W/2 Section 13; all of Sections 14, 15, 16 and 17; E/2 Section 19: all of Section 20; N/2 Section 21; N/2 Section 22; N/2 Section 23; all of Sections 29, 30, 31 and 32

Twp. 12 South. Rgs. 31 Host All of Section 36

Two, 13 South, Rgs. 31 Rast All of Sections 1, 2, 11, 12, 13 and 14; E/2 Section 15; all of Sections 22, 23, 24, 25, 26 and 27; E/2 Section 33; all of Sections 34, 35 and 36

Twp. 13 South. Rge. 32 East All of Sections 5, 6, 7, 8, 17, 18 and 19; W/2 Section 30; W/2 Section 31

Page 2: 000 Lg1 4-20-55

Twp. 14 South, 1880. 31 East All of Sections 2 and 3; E/2 Section 4; all of Sections 9, 10 and 11; W/2 Section 14; all of Sections 15, 16, 21, 22, 27 and 28; E/2 Section 32; all of Section 33; W/2 Section 34 Twp. 15 South, Rgs. 31 East All of Sections 4 and 5;

All of Sections 4 and 5; E/2 Section 7; all Section 8; H/2 Section 17; E/2 Section 18; E/2 Section 19; H/2 Section 20

(b) Establishing pool rules for the above-designated Caprock-Queen Fool pertaining to gas-oil ratio limits, annual well tests in conformance with provisions of Fule 301, casing programs, and such other rules as may be deemed advisable.

OIVEN under the seal of the New Mexico Oil Conservation Commission at Santa Fe, New Mexico, on this 4th day of April, 1955.

> STATE OF NEW HEXICO OIL CONSERVATION COMMISSION

N. B. MACEY SECRETARY

SEAL

DOCKET SUPPLEMENT

New Mexico Oil Conservation Commission Regular Hearing, April 20, 1955

CASE 888:

In the matter of the application of the Oil Conservation Commission upon its own motion for an order:

(a) Consolidating the following oil pools in Lea and Chaves Counties, New Mexico:

> North Caprock-Queen Pool; Caprock Pool; Drickey-Queen Pool; South Drickey-Queen Pool

into one pool, to be designated the Caprock-Queen Pool and to include the following-described acreage:

NEW MEXICO PRINCIPAL MERIDIAN

Twp. 12 South, Rge. 32 East SW/4 Section 1; S/2 Section 11; W/2 Section 12; W/2 Section 13; all of Sections 14, 15, 16 and 17; E/2 Section 19; all of Section 20; N/2 Section 21; N/2 Section 22; N/2 Section 23; all of Sections 29, 30, 31 and 32

Twp. 12 South, Rge. 31 East All of Section 36

Twp. 13 South, Rge. 31 East All of Sections 1, 2, 11, 12, 13 and 14; E/2 Section 15; all of Sections 22, 23, 24, 25, 26 and 27; E/2 Section 33; all of Sections 34, 35 and 36

Twp. 13 South, Rge. 32 East All of Sections 5, 6, 7, 8, 17, 18 and 19; W/2 Section 30; W/2 Section 31 Docket Supplement, April 20, 1955 Hearing

-2-

Twp. 14 South, Rge. 31 East All of Section 2 and 3; E/2 Section 4; all of Sections 9, 10, and 11; W/2 Section 14; all of Sections 15, 16, 21, 22, 27 and 28; E/2 Section 32; all of Section 33; W/2 Section 34

Twp. 15 South, Rge. 31 East All of Sections 4 and 5; E/2 Section 7; all Section 8; W/2 Section 17; E/2 Section 18; E/2 Section 19; W/2 Section 20

(b) Establishing pool rules for the above-designated Caprock-Queen Pool pertaining to gas-oil ratio limits, annual well tests in conformance with provisions of Rule 301, casing programs, and such other rules as may be deemed advisable.

-3-Case No. 888

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notice of the hearing of the application shall be published in the manner provided by law.

(6) That surface pipe shall be set in all wells drilled within the boundaries of the Caprock-Queen Oil Pool as hereinafter defined and that sufficient cement must be used to circulate to the surface or the bottom of the cellar.

(7) That said surface pipe must be run to a depth sufficient to completely case-off the "red-bed" section. For wells drilled on top of the Caprock, this depth will be approximately 300 feet. For those wells drilled below the Caprock, surface pipe must be run to an approximate depth of 180 feet.

(8) That gas-oil ratio tests shall be conducted annually on all oil wells in the Caprock-Queen Oil Pool during the month of May, and that the results thereof shall be reported to the Commission on Form C-ll6 on or before the fifteenth (15th) day of June of each calendar year. Such tests shall be made in accordance with the provisions of Commission Rule 301.

PROVIDED FURTHER, that the above rules, in addition to such of the general rules and regulations of the Commission as are not in conflict therewith, be, and the same hereby are adopted to govern the drilling, completion and operation of all wells in the Caprock-Queen Oil Pool of Lea and Chaves Counties, New Mexico.

(a) that any well completed prior to Journey 1, 1951 Shall be exempt from the provisions of (8) above; however, gas-oil ratio tests on such wells may be required from time to time by the Commission.

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Case No. 888 $(//)$	ale distriction le de Ale proprietor
In the matter of the applicat	ion of the Oil Conservation
Commission upon its own motion for an o	rder:
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√N/2 Section 22 ✓N/2 Section 23 ✓all Sections 29, 30, 31 and 3	2
TOWNSHIP 12 SOUTH, RAN All-of-Section-36- El-y SW/4 of Sec 26	GE 31 EAST, NMPM
TOWNSHIP 13 SOUTH, RAN All Section 1, 2, 11 and 12, 1	
 E/2 Section 15 All of Sections 22, 23, 24, 2 E/2 Section 33 All of Sections 34, 35 and 36 	
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