CASE 1886: Application of CAMPREL, E. P. Tor exception to RULE 107 (e) to recomplete his No. 1 Cleveland.

Case Mo.

1886

Application, Transcript, Small Exhibits, Etc.

DEFORE THE CIL COMBERVATION COMMISSION OF THE STATE OF HEW MEXICO

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

> CASE No. 1886 Order No. R-1604

APPLICATION OF E. P. CAMPBELL FOR AN EXCEPTION TO MULE 107 (a) OF THE COMMISSION RULES AND REGULATIONS FOR ONE WELL IN EDDY COUNTY, NEW MEXICO

ORDER OF THE COMMISSION

BY THE COMMISSION:

This cause came on for hearing at 9 o'clock a.m. on January 27, 1960, at Santa Fe, New Mexico, before Elvis A. Utz. Examiner duly appointed by the Oil Conservation Commission of New Mexico, hereinafter referred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this Story day of February, 1960, the Commission, a quorum being present, having considered the application, the evidence adduced, and the recommendations of the Examiner, Sivis A. Uts, and being fully adviced 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 is the owner and operator of the R. P. Campbell No. 1 Cleveland Well, located in the NW/4 NW/4 of Section 33, Township 18 South, Range 26 Nest, NEFM, Nddy County, New Mexico.
- (3) That the subject well was originally drilled to a total depth of 6107 feet with 5½-inch casing set at total depth and was subsequently plugged and abandoned.
- (4) That the applicant proposes to recomplete the subject well as a "slim-hole" completion in the Pennsylvanian formation with a total depth of approximately 9400 feet, using a string of 2-7/8 inch J55 tubing as casing from 6107 feet to total depth, which completion method would require an exception to Rule 107(e) of the Commission Rules and Regulations.

-2-Case No. 1886 Order No. R-1604

- (5) That the hole size from \$107 feet to total depth can be no larger than 4-3/4 inches and the use of 2-7/8 inch J\$5 tubing in that portion of the hole will make possible a safer and more reliable comenting program than would be possible if larger diameter casing were used as originally planned by the applicant.
- (6) That the application should be approved in order to permit the applicant to utilize the presently drilled 6107-foot hole.
- (7) That the applicant should circulate cement outside the 2-7/8 inch J55 tubing to at least 4500 feet.

IT IS THEREFORE ORDERED:

That the applicant be and the same is hereby authorised to recomplete the H. P. Campbell No. 1 Cleveland Well, located in the HW/4 ME/4 of Section 33, Township 18 South, Range 26 Bast, MHPM, Eddy County, New Mexico, as a "slim-hole" completion in the Pennsylvanian formation with a total depth of approximately 9400 feet, using a string of 2-7/8 inch J55 tubing as casing from 6107 feet to total depth.

<u>PROVIDED HOWEVER</u>, That the applicant shall circulate coment outside the 2-7/8 inch JS5 tubing to at least 4500 feet.

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

> STATE OF NEW MEXICO OIL COMBERVATION COMMISSION

JOHN BURROUGHS, Chairman

MURRAY E. MORGAM, Member

William

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

vem/

1 411 application of Mountain States Case No. 1896 Advisioni Corporation for a 101-acre Cian no R- 1610 1-11-60 non-standard gas unit in the Tikil & Ha Pictured Cliffs formation adjacent fut & Com to the Pine Lake - Pictured Cliffo atifulting for Hool, Rio Cerriba County, new melico, and for an unorthodox gas WEll location FINDS: (Heard by hutter on February 104.) (2) That the applicant, mountain States Ketroleum Corporation, is the operator of partial Section 30, Township 26 North, Rauge 2 West, Rio arriba County, new mexico. (3) That the applicant proposed the establish ment of a 181-acre non-standard gas unit in the Pictured Cliffs formation adjacent to the Pine Lakes - Pictured Cliffs Pool consisting of all of said partial Section 30, said unit to be ded icated to applicant's Tederal Well No. 30-F, located at an unorthodox location 190 feet from the Suit line and 750 feel from the West line of sail Section 30. (4) That approva (of the subject application will neither cause waste nor impair correlative rights. IT IS THEREFORE OFDERED:

We that a 181-acre non-standard gas unid in the Rictured Cliffs formation adjacent to the Pine Lake - Pictured Cliffs Pool consisting of all of partial

Lection 30, Downship 26 North, Range 2 West, Rio auchier Courty, new mexico, be and the same is hereby established. Said unit is to be dedicated to applicant a tedera (Rell No. 30-F, located an unortholot 190 feet from the South line and 150 feet from the West line of said Section 30.

(2) That the safe estation howert of the above - describe (181-acre non-standart gas unit shall not beer effective until such time as the Commission is feveriled with an effect a commission to present commission agreement coveriles the subject acrease.

BEFORE THE OIL CONSERVATION COMMISSION Mabry Hall Sanua re, New Mexico January 28, 1960

EXAMINER HEARING

IN THE MATTER OF:

Application of E. P. Campbell for an exception to Rule 107 (e) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an exception to Rule 107 (e) in order to recomplete his No. 1 Cleveland Well, located in NW/4 NE/4 of Section 33, Township 18 South, Range 26 East, Eddy County, New Mexico, as a "slim-hole" completion in the Pennsylvanian formation at a depth greater than 5000 feet.

BEFORE:

Mr. Elvis A. Utz

TRANSCRIPT OF HEARING

MR.UTZ: Case No. 1886.

MR. FLINT: Case No. 1886, application of E. P. Campbell for an exception to Rule 107 (e) of the Commission Rules and Regulations.

MR. SOLSBERY: My name is A. D. Solsbery of Roswell, New Mexico. Also here with me is Mr. Don Brown of the firm of Brown and Brainard as attorneys for the applicant. We have one witness and two Exhibits.

> (2 Exhibits marked for identification.)

GUY A. SWARTZ

called as a witness, having been duly sworn, testified as follows:



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PHONE CH

MR. UTZ: Are there any other appearances in this case? You may proceed.

DIRECT EXAMINATION

BY MR. SOLSBERY:

Will you please state your name and address and Q. occupation, please?

My name is Guy A. Swartz. My residence is in Roswell. And my occupation is consulting geologist.

Have you ever appeared before the commission before, Mr. Swartz?

Yes, sir, I have several times in the past.

MR. SOISBERY: Will the commission accept Mr. Swartz's qualifications?

MR. UTZ: Yes, sir. His qualifications are accepted.

(By Mr. Solsbery) Now, Mr. Swartz, are you the geologist for Mr. E. P. Campbell in charge of drilling and completing his well down in Southeastern New Mexico?

Yes, sir, I am in charge of all Mr. Campbell's operations, all of his drilling and completion operations in Southeastern New Mexico and portions of West Texas.

In your capacity as field representative for Mr. E. P. Campbell, you have filed an application No. 1886, to complete your No. 1 Cleveland Well at a depth of 9400 feet, this well being located in the Northwest quarter of the Northeast quarter of



DEARNLEY-MEIER REPORTING SERVICE, Inc.

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Section 33, Township 18 South, Range 26 East, by setting two and 7/8inch tubing and as your final oil string, which completion would be an exception to Rule 107 (e); that application was filed by you, Mr. Swartz?

That's correct. That is concerned with paragraph one and two under Rule 107 (e).

Now, exception to the Rule 107 (e) provides that you can have a slim hole completion if the well is to be completed at a depth of less than 5000 feet, however, this well is to be completed at a depth of approximately 9400 feet.

That's correct.

Now, I refer you to Exhibit No. 1, Mr. Swartz, relative to the location of this well. Did you prepare that Exhibit?

Yes, sir, I did.

Exhibit No. 1 is merely an ownership and lease that of the area immediately around the wildcat subject well, which is located 198 from the East lines and 616 from the North lines of Section 33, 18 South, 26 East. Is this well located well within one mile of the boundaries of the Atoka Penn gas field?

No. sir. This well is outside of the one mile --It is being projected to the horizon which will be more than one mile outside of any existing pool.

This is considered a wildcat well?



PHONE CH 3-6691

Yes, sir.

Now, will you give the commission the background 0 and history of this well from its commencement down to pay?

MR. UTZ: Is this well already drilled and completed?

No. sir. The well is presently being drilled at approximately 7800 feet. The well was originally drilled to a depth of 6107 feet and was plugged and abandoned on 9-15-59. A $12\frac{1}{2}$ " hole was drilled to a depth of 1100 feet, and 8-5/8", twentyfour pound casing set and circulated with 500 sacks of cement.

MR. UTZ: That was circulated?

Yes, sir. The hole was drilled with a 7-1/8" bit to a total depth of 6107, Whereupon, 52" - 14 pound casing was set and cemented with a total of 1250 sacks of cement in two stages. And this cementing process was also circulated. After several unsuccessful completions, an attempt in the Wolfcamp and Abo formations, the well was finally plugged and abandoned on 9-15-59. The application was filed to re-enter to a depth of approximately 9500 foot in the lower Pennsylvania formation. That application was filed on December 23, 1959, in which a 4" highydrill liner was proposed to case the hole section below 6107 feet. Upon later consideration, it was felt that there would be less risk involved in the running of the casing, and also in obtaining and adequate cement sheet behind the casing, and a smaller size of oil string was used. And for that reason, the application was filed to the commission on December 29th.



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HONE CH 3-6691

A The original size oil string was proposed to be a 4" hydril. The well is presently drilling at approximately 7800 feet with a 4 3/4" hole size. Additional reasons for running the smaller sized oil string is that approximately 60 to 70 percent of the section drilled between 6107 and 9400 feet is primarily shale of such a type that it would be possible for the shale section to fall in while the casing was being run. With a 4" hydril casing, there would also be insufficient clearance for utilization of centralizers to properly centralize the casing within the well bore.

Q (By Mr. Solsbery) A possibility you would experience some difficulty with the shale section by using a hydril liner?

A There would be more possibility of encountering trouble with a larger size oil string than there would be, of course, with a 2 7/8" tubing. There are also several water zones which may be encountered above and below the protected pay horizon, which if not properly sealed by cement between the oil string and the outside of the hole, would lead to communication and possibly abandonment prematurely of the anticipated gas zone.

Q Now, what you are saying there, Mr. Swartz, is that you feel you cannot get an adequate cement job by using the 4" hydril liner due to the lack of clearance between the hydril liner and the hole?



- A That's correct.
- Q Do you feel that you can get a better cement job by using the 2 7/8" tubing as your final oil (string)
 - A Yes, sir.
- Q Now, are you doing this for economic reasons, Mr. Swartz?
- A No, sir. At the present time, Mr. Campbell has in stock more than enough 4" hydril casing to adequately complete this well with that method. The proposed method was primarily for adequate protection of the pay horizons from any possible water zone above or below the pay.
- Q Mr. Swartz, I refer you to applicant's Exhibit No. 2.
 Did you prepare this Exhibit?
 - A Yes, sir.
 - Q What is that Exhibit, Mr. Swartz?
- A Exhibit No. 2 is a schematic diagram showing the proposed casing program and the existing casing now in the well.
- Q Do you feel that this method of completion is mechanically sound?
 - A Yes, sir.
- Q In your own opinion, is this type of completion in the best interest of conservation?
 - A Yes, sir, it is.
- Q If the commission sees fit to grant this application, in your opinion, will it impair correlative lights?



CH 3-6691

No, sir.

MR. BROWN: May I ask just one or two additional questions? MR. UTZ: Yes.

EXAMINATION BY MR. BROWN

Mr. Swartz, I don't know whether I understood you clearly or not. Did you give us the date when this well was first spudded in?

> No, sir. A

Well, the only point I am driving at is that is it what you would call a comparatively old well or new well?

No, sir. The well was spudded in approximately one and a half years ago.

Then, under your Exhibit No. 2, you show that you have surface casing set to 1100 feet, I believe, 24 pound casing, 8 5/8".

That's correct.

Q Now, under your proposed plan of operation, would that surface casing be in any way disturbed?

No, sir.

And as to your knowledge, what condition is the surface casing presently in?

The surface casing and the 52" casing which will now act as an intermediate string, were both circulated with the cement behind the casing, and except for the preparations which exist between the 6056 feet, these casings should be undisturbed from



ALBUQUERQUE, NEW MEXICO

PHONE CH 3-C691

- Now, what is the inside diameter of this 52" casing, intermediate string, the inside diameter?
 - The inside diameter of the $5\frac{1}{2}$ " casing is 5.012".
- How much clearance will you have if you go ahead and set this hydril liner bottom string -- how much inside clearance will you have between the 53" - 14 pound casing, which presently is set in the hole as an intermediate string, and the ultimate 4" hydril liner?
- We would have 1" clearance, or you would be 1/2" diametric clearance within the 52" casing; however, within the 4 3/4" hole, which is presently being drilled, there would only be 3/8" diameter clearance.
- Now, from your experience in your particular profession, is it mechanically possible to drill the lower hole, or the lower bore hole in such a manner that the proposed 4" hydril would remain clear and free of the walls of the hole at all points on down to the bottom, or would it touch at various places?
- Inasmuch as the clearance between a 4" hydril and a 4 3/4" hole size would be so small, so as not to allow the utilization of any centralizers, the larger or the 4" hydril casing, would probably be in contact with the hole, from a total depth to well within the casing.
- Now, what about your effect of that particular problem as to the proposed cementing of this 4" hydril?



CH 3-6691

If the casing is in contact with the outside of the hole, the cement sheet around this 4" hydril liner would be so thin that insufficient strength would be available to adequately shut off any water zones above or below the projected pay horizon.

Q Are you familiar with any regulations or recommendations which either the New Mexico State Engineer's Office or this commission has heretofore prescribed as to the distance between the outside of an uncased hole and the proposed string of casing which is to be put in.

The State Engineer's Office, I believe, recommends a clearance of at least 2" in diameter, greater than the string of casing being run.

And under this proposed 4" hydril, will you be able to achieve that recommendation?

No, sir.

What about your 2 7/8" tubing which you propose to set. Would that substantially comply with that?

Yes, sir.

Now, have you told us what production you ultimately hope to encounter at 9500 feet?

The present status of the well is that well is being drilled at approximately 7800 feet to a protected pay horizon near or estimated to be near 9300 feet. This particular pay horizon is producing, or has been tested, and is shut in in wells



PHONE CH 3-6691 DEARNLEY-MEIER REPORTING SERVICE, ALBUQUERQUE, NEW MEXICO

approximately one mile distant to this subject well. This particular pay horizon is the pay designated in the Atoka Pennsylvania Pool.

- Q And do you hope to encounter oil or gas?
- A It's anticipated that gas production will be encountered.
- And from your experience, knowledge, and information in your profession, in your opinion, would this 2 7/8" tubing, when properly set, cemented and placed in operation, adequately and properly produce from the zone which you hope to encounter as a gas well?
- The diameter -- the inside diameter of the 2 7/8" casing is such that an adequate flow should be allowed for any anticipated allowable for this zone.
- Do you feel that there is a substantial danger that you may not be able to complete the well or might even lose the well itself if you attempt to set the 4" hydril through this shale section which you have just described to the commission?
- There is considerably more risk encountered wit'. the larger size casing.

MR. BROWN: I believe that is all.

MR. SOLSBERY: We will offer our Exhibits 1 and 2 into the record at this time.

MR. UTZ: Without objection, they will be received.

MR. SOISBERY: Did you have something else, Mr. Swartz?



PHONE CH 3-6691

A No.

MR. SOLSBERY: Well, that concludes the direct.

EXAMINATION BY MR. UTZ

- Q Mr. Swartz, was this well plugged and abandoned as a Wolfcamp dry hole?
 - A Yes, sir.
 - Q It was actually cemented and plugged?
 - A Yes, sir.
- Q And you had to drill out the cement in order to accomplish your recompletion here?
 - A That's correct.
- Q How about workovers and 2 7/8" tubing at this depth?

 Do you have tools with which you can properly work the well over?
- A Yes, sir, to a more limited degree than with the larger size casing.
 - Q But you can do your perforations and so forth?
 - A Yes, sir.

The proposed pay zone will be drilled and tested upon penetration, and the 2 7/8" tubing will be run with a Halliburton of the collar - float shoe on the bottom at a depth of approximately 100 feet below the pay zone. It is anticipated to place a seating nipple within the string of tubing approximately one or two joints above the anticipated pay zone. This seating nipple will have an inside diameter of $2\frac{1}{4}$ " through which the well can be logged or perforated.



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How far up into the 52 do you propose to bring the cement?

Since there are perforations in the $5\frac{1}{2}$ " casing, as high as 4800 feet, which may have a small amount of sulphur water, it is anticipated to bring the cement to approximately 4500 feet to adequately seal any perforations now open.

And what this boils down to is trying to save about 61000 feet of hole?

Yes, sir.

MR. UTZ: Are there any other questions of this witness?

EXAMINATION BY MR. FLINT

Mr. Swartz, is it your understanding that Rule 107 (4) is an exception to the general requirements as to casing wells drilled in the State of New Mexico? In other words, this slim hole completion which is permitted by the rule is in itself an exception to the normal hole size requirements?

It is an exception to the rules previous to the issuance of this order, yes; however, it is my understanding that a well may be completed as a slim hole completion with tubing, and at a depth of 5000 feet or less.

And under your proposal, you would request to go another 4000?

500 feet.

Below what is prescribed by Rule 107 (e).



DEARNLEY-MEIER REPORTING SERVICE, Inc. ALBUQUERQUE, NEW MEXICO

So, this is a fairly substantial exception to what is provided by Rule 107 (e)?

However, it is -- it was not applied for Yes, sir. with the intention of lowering our costs of the well. The application was made to more insure the productivity of the well when completed.

- You have stated that this proposal is not based upon an economic benefit which would result from this being granted?
 - That's correct.
- Would there in fact be a difference in the cost of completing it as you propose it?

Yes, sir, there would be a difference in the cost. The cost would be less with the tubing completion.

In round figures, can you tell us approximately what the cost of completion to this depth would be, assuming that you didn't have this well to work through?

MR. UTZ: What size casing?

MR. FLINT: Assuming a standard -- the standard requirement for a hole of this depth.

The difference in cost would be that of the 4" hydril liner, which Mr. Campbell does have in stock, and has been retrieved from another well.

Is the risk that you contemplate, assuming that you are using the 4" hydril, is the risk primarily that of not sealing off the water?



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Q In the horizons?

Yes. I would estimate the difference in cost to be probably less than \$5,000.00.

Then the risk would not be so much in getting the completion with 4" hydril, but rather, it would be the risk of production after the completion was made?

Yes, sir. The application was made primarily in the interest of conservation.

Then, you stated that you expect this would be a gas well upon completion at approximately 9300 feet?

Yes, sir.

MR. FLINT: That is all.

EXAMINATION BY MR. UTZ

Mr. Swartz, your lack of economic consideration is between the 2 7/8" and 4" hydriller, is it not? In other words, you had 4" hydril in stock, and your only reason for wanting to run the 2 7/8" is because of your completion problem?

That's correct.

There was an economic consideration in trying to save 6100 feet of hole, was there not?

That's correct.

Otherwise, if you hadn't wanted to save that, you could drill a new well?

That's true.



MR. UTZ: Any other questions? If not, the witness may be excused.

Are there any other statements to be made in this case? If not, the case will be taken under advisement.

REPORTER'S CERTIFICATE

- I, Thomas T. Tomko, Court Reporter, DO HEREBY CERTIFY that on Thursday, January 28, 1960, before the 011 Conservation Commission, Mabry Hall, Santa Fe, New Mexico, the above entitled case came on to be heard before Mr. Elvis A. Utz.
- I, FURTHER CERTIFY that I recorded in stenotype this proceedings of the above entitled case and the foregoing 14 pages of typewritten transcript is a true and correct transcript of my said stenotype notes, to the best of my ability.

Dated at Albuquerque, New Mcxico this 78 January, A.D., 1960.

Thomas T. Tomko

Court Reporter
I do haroly certify that the foregoing is a complete result of the proceedings in the Exa loca Logians of Case No. 1.176.

... Examiner New Mexico Oil Conservation Commission



ALBUQUERQUE, NEW MEXICO

DOCKET: EXAMINER HEARING JANUARY 27, 1960

OIL CONSERVATION COMMISSION - 9 a.m., MABRY HALL, STATE CAPITOL, SANTA FE The following cases will be heard before Elvis A. Utz, Examiner, or A. L. Porter, Jr., Secretary-Director:

CASE 1866:

Application of British-American Oil Producing Company for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its West Bisti-Lower Gallup Sand Unit Agreement, which Unit is to comprise 14,331 acres, more or less, in Townships 25 and 26 North, Ranges 13 and 14 West, San Juan County, New Mexico.

CASE 1867:

Application of British-American Oil Producing Company for a pressure maintenance project in the Bisti-Lower Gallup Oil Pool and promulgation of special rules in connection therewith. Applicant, in the above-styled cause, seeks an order authorizing a pressure maintenance project in the Bisti-Lower Gallup Oil Pool, San Juan County, New Mexico, by the injection of water into the Lower Gallup formation through 17 wells. Applicant further proposes that special rules be adopted governing said project including the transfer of allowables from injection and shut-in wells to producing wells in the project and for establishment of an administrative procedure to convert additional wells to injection.

CASE 1868:

Application of Hamilton Dome Oil Company, Ltd. for permission to commingle the production from three separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Justis-Drinkard Pool, the Justis-Fusselman Pool and an undesignated Tubb pool from wells on a lease consisting of the S/2 SE/4 of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico.

CASE 1869:

Application of Newmont Oil Company for approval to convert five additional wells in the Loco Hills Pool to water injection. Applicant, in the above-styled cause, seeks an order authorizing it to convert to water injection five additional wells in its water flood project in the Loco Hills Pool, Eddy County, New Mexico. Said wells are the Brigham Well No. 1-A, Yates Well No. 4, Yates A Well No. 10, Yates A Well No. 12, and Coppedge Well No. 2, located respectively in the SE/4 SE/4 of Section 31, Township 17 South, Range 30 East, NE/4 SW/4 of Section 6, SW/4 SW/4 of Section 6, NE/4 NE/4 of Section 6, and NW/4 NW/4 of Section 5, all in Township 18 South, Range 30 East.

CASE 1870:

Application of Newmont Oil Company for permission to install four separate automatic custody transfer systems. Applicant, in the above-styled cause, seeks an order authorizing it to install a separate automatic custody transfer system on each of four leases in applicant's water flood project in the Loco Hills Pool, Eddy County, New Mexico.

CASE 1871:

Application of Union Oil Company of California for approval of a unit agreement. Applicant, in the above-styled cause, seeks an order approving its North Anderson Ranch Unit Agreement, which Unit is to comprise 360 acres, more or less, consisting of portions of Sections 32 and 33, Township 15 South, Range 32 East, Lea County, New Mexico.

CASE 1872:

Application of Gulf Oil Corporation for authority to commingle the production from four separate leases and for approval of an automatic custody transfer system to handle said commingled production. Applicant, in the above-styled cause, seeks permission to commingle the production from the following four separate leases and to install an automatic custody transfer system to handle the Pearl-Queen Pool production from all wells located thereon:

Lea-State "AP"lease, E/2 of Section 30; Lea-State "AQ"lease, N/2 of Section 32; Lea-State "BG"lease, N/2 of Section 33; Lea-State "IH"lease, W/2 SW/4 and W/2 SE/4 of Section 29,

all in Township 19 South, Range 35 East, Lea County, New Mexico.

CASE 1873:

Application of The Atlantic Refining Company for an oil-oil dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Langlie Federal "A" Well No. 1, located in Unit H, Section 14, Township 25 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of oil from the Justis-Blinebry Pool and the production of oil from an undesignated Tubb pool through parallel strings of tubing.

CASE 1874:

Application of Val R. Reese & Associates, Inc., for a dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Lybrook Well No. 1-19, located in Unit C, Section 19, Township 24 North, Range 6 West, Rio Arriba County, New Mexico, in such a manner

as to permit the production of gas from an undesignated Gallup pool and the production of gas from an undesignated Dakota pool through parallel strings of tubing.

CASE 1875:

Application of Continental Oil Company for a non-standard gas proration unit and for an order force-pooling the interests therein. Applicant, in the above-styled cause, seeks the establishment of a 160-acre non-standard gas proration unit in the Blinebry Gas Pool consisting of lots 6, 10, 11, and 12 of Section 3, Township 21 South, Range 37 East, Lea County, New Mexico, to be dedicated to Shell Oil Company's Taylor-Glenn Well No. 1, located 3226 feet from the North line and 1980 feet from the West line of said Section 3. Applicant further seeks an order force-pooling the interests of those in said non-standard gas proration unit who have gas rights within the vertical limits of the Blinebry Gas Pool, including M. F. Taylor, P. O. Box 574, Amarillo, Texas, and R. B. Glenn, P. O. Box 461, Amarillo, Texas.

CASE 1876:

Application of Continental Oil Company for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Weir (Drinkard) Oil Pool and Weir-Tubb Gas Pool from all wells on its Britt B-15 lease consisting of the W/2 and the W/2 E/2 of Section 15, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 1877:

Application of Continental Oil Company for permission to install an automatic custody transfer system and for permission to produce more than 16 wells in a common tank battery. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system to handle the production from all Skaggs Pool oil wells on its Southeast Monument Unit comprising lands located in Township 20 South, Ranges 37 and 38 East, Lea County, New Mexico.

CASE 1878:

Application of Continental Oil Company for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks an order authorizing it to commingle the production from the Weir (Drinkard) Oil Pool and the Weir-Tubb Gas Pool from all wells on that portion of the Southeast Monument Unit consisting of the W/2 W/2 of Section 14 and the E/2 E/2 of Section 15, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 1879:

Application of Amerada Petroleum Corporation for a gas-oil dual completion and for a non-standard gas proration unit. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its State EM "A" Well No. 2, located 660 feet from the South and West lines of Section 22, Township 19 South, Range 37 East, Lea County, New Mexico, in such a manner as to permit the production of gas from the Eumont Gas Pool and the production of oil from the Eumont Gas Pool through the casing-tubing annulus and the tubing respectively. Applicant further seeks the establishment of a 160-acre non-standard gas proration unit in the Eumont Gas Pool consisting of the SW/4 of said Section 22 to be dedicated to the said State EM "A" Well No. 2.

CASE 1880:

Application of Texaco Inc. for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Blinebry 0.1 Pool and the Drinkard Pool from all wells on its V. M. Henderson lease consisting of the N/2 of Section 30, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 1881:

Application of Texaco Inc. for approval of an automatic custody transfer system. Applicant, in the above-styled cause, seeks an order authorizing the installation of automatic custody transfer facilities to handle the Crossroads-Devonian Pool production from the U.D. Sawyer lease comprising the E/2 of Section 34, Township 9 South, Range 36 East, Lea County, New Mexico.

CASE 1882:

Application of Texaco Inc. for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Tubb Pool and the Blinebry Oil Pool from all wells located on its Mittie Weatherly lease comprising the NW/4 of Section 17, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 1883:

Application of Texaco Inc. for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Culwin (Queen) Pool and the Culwin-Yates Pool from all wells located on its Federal Lease comprising the NE/4, E/2 NW/4, N/2 SE/4 and the NE/4 SW/4 of Section 6, Township 19 South, Range 31 East, Eddy County, New Mexico.

CASE 1842:

(Continued)

Application of Skelly Oil Company for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Langlie-Mattix Pool and the Drinkard Pool from all wells on its Baker "A" lease comprising the NW/4 of Section 26, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1884:

Application of Skelly Oil Company for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Langlie-Mattix Pool and the Drinkard Pool from all wells on that portion of the J. V. Baker lease comprising the SE/4 SW/4 of Section 22, Township 22 South, Range 37 East, Lea County, New Mexico.

CASE 1885:

Application of Skelly Oil Company for permission to commingle the production from two separate pools. Applicant, in the above-styled cause, seeks permission to commingle the production from the Drinkard Pool and the Tubb Gas Pool from all wells on its State "K" lease comprising the N/2 NW/4 of Section 32, Township 21 South, Range 37 East, Lea County, New Mexico.

CASE 1886:

Application of E. P. Campbell for an exception to Rule 107 (e) of the Commission Rules and Regulations. Applicant, in the above-styled cause, seeks an exception to Rule 107 (e) in order to recomplete his No. 1 Cleveland Well, located in NW/4 NE/4 of Section 33, Township 18 South, Range 26 East, Eddy County, New Mexico, as a "slim-hole" completion in the Pennsylvanian formation at a depth greater than 5000 feet.

CASE 1887:

Application of Monsanto Chemical Company for an exception to the "no-flare" provision of Order R-1427. Applicant, in the above-styled cause, seeks an exception to February 15, 1960, to the "no-flare" provision of Order R-1427 for five wells in the Bisti-Lower Gallup Oil Pool, San Juan County, New Mexico.

CASE 1888:

Application of C. W. Trainer for off-lease storage of oil production. Applicant, in the above-styled cause, seeks permission to store the Pearl-Queen Oil Pool production from his Rushing lease, consisting of the W/2 NE/4 of Section 22, Township 19 South, Range 35 East, Lea County, New Mexico, in a tank battery located on his Signal State lease, consisting of the E/2 NW/4 of said Section 22.

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E. P. CAMPBELL CLFAVELAND LEASE Scale = 1320 feet Case No. 1886 Exhibit No. 1 January 27, 1960

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E. P. CAMPBELL NO. 1 CLEAVELAND

NW-NE SECTION 33, T-18-S, R-26-E

Case No. 1886 Exhibit No. 2

SCHEMATIC DIAGRAM

Jamary 27, 1960 Ground Level Flavotian 33751 Hole Size 12-1/4" 8-5/8m 24# Casing Set @ 1100 feet w/500 sacks cement T.C. Circulated 4500164 Proposed Top of Cement between tubing & 5-1/2" Casing approximately 1500 feet. Various Perforations between 4800-6056 feet Hole Size Pa A 9-18-59 7-7/8" 75-1/2" 14# Casing Set @ 6107 feet w/1250 sacks cement Circulated Hole Size 4-3/11 Proposed Oil String-2-7/8" 6.4# J55 Tubing Seating Nipple 2-3/4" OD 2-1/4" ID Proposed Perforations approximately 9300 feet Haliburton Float Collar & Float Shoe

Proposed Total Depth Approximately 9400 feet

Case 1886

E. P. CAMPBELL LUBBOCK, TEXAS

TELEPHONE

December 29, 1959

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

RE: Exception to Rule No. 107-E Casing Requirements

Gentlemen:

Application is hereby made for an exception to Rule 107-E of the New Mexico Oil Conservation Commission Rules and Regulations to apply to the E. P. Campbell No. 1 Cleveland located in the NW/4 NE/4 of Section 33, Township 18 South, Range 26 East, Eddy County. New Mexico.

This well was originally drilled to a total depth of 6107 feet and plugged and abandoned September 15, 1959. Five and one-half inch casing was set at total depth and cemented with 1250 sacks. It is proposed to re-enter this well and drill to the lower Pennsylvanian gas pay, utilizing 4-1/4" bits. A Notice of Intention to Drill was filed November 23, 1959 on which a h inch Hydril liner was indicated to be set from 5900 to 9500 feet. Inasmuch as there is a considerable shale section to be encountered between the total depth and the possible pay horizon, it is felt that the risk is quite high against running this size casing. It is also felt that, inasmuch as the clearance between the 4 inch liner and the side of the hole is so small and that there would be insufficient clearance for centralizers. the possibility of obtaining an adequate cement seal to properly isolate the various zones of porosity would be poor. For these reasons, it is proposed to utilize 2-7/8 inch tubing as the final oil string. Since operations on this well are starting immediately, it is requested that this proposal be given consideration either administratively or by hearing at the earliest possible date.

Very truly yours,

E. P. CAMPBELL

GAS/bs

Oil Conservation Commission

P. Campbell 321 Carper Bldg., Artesia, N. Mex. 1603 Broadway, Lubbock, Texas

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

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CASE	1886	Heari	ng Date	1-27-60	
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