CASE 2066: Application of HUMBLE OIL E REFU. CO. FOR AN OIL-GAS DUAL of its KATHLEEN STECKEL WELL NO. 1.

Casa Mo.

2066

Application, Transcript,
Small Exhibits, Etc.

BEFORE THE OIL COMSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE MEARING CALLED BY THE OIL COMMERVATION CONSISSION OF MEN MEXICO FOR THE PURPOSE OF CONSIDERING:

> CASE No. 2046 Order No. R-1769

APPLICATION OF MORBE CIL & REPIEING COMPANY FOR A "SLIM-MOLE" CIL-GAS DEAL COMPANY FOR A "SLIM-MOLE" CIL-GAS DEAL AND LY AN UNDERSCHAFTED PRIMITY PARTY FOOL, ENTY COUNTY, NEW MEXICO.

CREEK OF THE COMMISSION

BY THE COMMISSION:

This come came on for hearing at 9 e'clock n.m. on September 7, 1960, at Senta Pe, New Humiso, before Elvis A. Wha, Eminimer duly appointed by the Gil Conservation Consission of New Marios, hereigniture reflerred to as the "Commission," in accordance with Rule 1214 of the Commission Rules and Regulations.

NOW, on this // day of September, 1960, the Coumission, a quarter being present, having considered the application, the evidence addresd, and the promundations of the Examiner, Sivis A. Uts, and being fully advised in the premises,

FIRDS:

- (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, Humble Gil & Refining Company, is the owner and operator of the Enthless Status Well No. 1, located in the HM/4 HM/4 of Section 19, Tourship 18 South, Range 27 Rost, HERM, Eddy County, New Musico.
- (3) That the applicant proposes to dually complete the said Nothlean Steehel Wall No. 1 in such a manner as to permit the production of oil from an undesignated also peol and the production of gas from an undesignated Punnsylvanian pool through permilel string of 4-1/2 inch casing and 2-7/8 inch casing, respectively, comented in a common well hore. Applicant proposes to produce the abo oil through tubing, 2 inches in diameter or greater, installed within the 4-1/2 inch casing.
- (4) That as an alternative to the above-described installation, the applicant proposes to produce Abo oil through 2-7/8 inch casing set at 5500 feet and Fennsylvanian gas through tubing, 2 inches in diameter or greater, installed within 4-1/2 inch casing set at 9500 feet.

CASH No. 2066 Order No. R-1769

- (5) That is order to protect the productive horizons, cement should extend from total depth of 9500 feet to a point 600 feet above the top of the uppermost pay some.
- (6) That contralisers or turbolizers should be installed at 30-foot intervals throughout the Abo and Pennsylvanian formations and to a point 100 feet above said formations.
- (7) That the mechanics of the proposed dual completion are feasible and in accord with good conservation practices.
- (8) That approval of the subject application will meither cause waste nor impair correlative rights.

IT IS THEREFORE ORDERED:

That the applicant, Numble Oil & Refining Company, he and the same is hereby authorized to dually complete its Enthicen Stackel Well No. 1, lessed in the NW/4 NW/4 of Section 19, Tourship 18 South, Range 27 East, NHSM, Eddy County, New Marico, in such a number as to possit the production of oil from an undesignated Abo pool through tubing 2 inches is diameter or greater installed within 4-1/2 inch casing and the production of gas from an undesignated Pennsylvanian pool through a parallel string of 2-7/8 inch casing commuted in a common well here.

PROVIDED HOUSEN, That coment shall extend from total dopth of \$500 feet to a point 600 feet above the uppermost pay some.

PROVIDED FURTHER, That contraliners or turboliners shall be installed at 30-foot intervals throughout the Abo and Pennsylvanian formations and to a point 100 feet above said formations.

PROVIDED FURTHER, That the applicant shall take communication tests upon completion and annually thereafter during the Gas-Oil Entio Test Period for this particular Abs pool.

PROVIDED FURTHER, That should the applicant dosine to produce Abo oil through 2-7/8 inch easing set at 5500 feet and Pennsylvenian gas through tubing 2 inches in diameter or greater installed within 4-1/2 inch easing set at 9500 feet rather than follow the installation approved by this Order, administrative approval by the Secretary-Director of the Commission of such alternate installation may be obtained without notice and hearing where an application has been filed with the Secretary-Director of the Commission, and (1) where proof is made that all offset operators have been notified of the application by registered mail and no objection has been received within 20 days following the mailing of such notice, or (2) where written waivers of objection from all offset operators are filed with the Secretary-Director of the Commission.

CASE No. 2046 Order No. R-1769

IT IS PERFEIR ORDERED.

That jurisdiction of this cause is hereby retained by the Countanies for such further order or orders as may some parameter or convenient for the prevention of waste and/or the protection of countainty to county with any requirement of this count, the Countainty may terminate the authority human garment and require the applicant or its successer and analysis to bind the authorities to require single-some production in the interest of countarystics.

ness at Junta Po, New Hauteo, on the day and your herein-

STATES OF SEEL SEELES CONTRACTOR

Alta Chinagh

MANAY E. MORGAN, Musbor

Q. f. Partin h

A. L. PORTER, Jr., Monhor & Songetary

GOVERNOR JOHN BURROUGHS CHAIRMAN

State of New Wexico Oil Conservation Commission

LAND COMMISSIONER MURRAY E. MORGAN MEMBEN



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

P. O. BOX 871

September 16, 1960

Mr. Howard Bratton Horway, Bow & Rinkle Box 547 Hoswall, New Mexico Re: Case No. 2066 Order No. <u>R-1769</u>

Applicant:

Rumble Oil & Refining

Dear Sir:

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

Very truly yours,

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

ir/

Carbon copy of order also sent to:

Hobbs OCC X Artesia OCCX Aztec OCC

Other____

OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

	Date 9-8-60
CASE NO. 2066	HEARING DATE 9-7-60
My recommendations for an order as follows:	r in the above numbered case(s) are
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LAW OFFICES

J. M. HERVEY 1974-1983 OFFICE OCHERVEY, DOW & HINKLE

HIRAM M. DOW JAN

GLARENCE E. HINKLE

HINKLE BUILDING

W E. BONDURANT, JR.

GEORGE H. HUNKER, JR.

HOWARD C. SRATTON, JR.

S. B. CHRISTING AND

LEWIS C. CONTR.

PAUL W. EATON, JR.

ALLOWS AND C. SRATTON, JR. August 22, 1960

Jill 2066 Care 2066

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

> Re: Humble Dual Slim Hole Application - September 7 Hearing

Dear Dan:

CONRAD E. COFFIELD

With relation to the Humble application for a slim hole dual completion of Humble's No. 1 Kathleen Steckel Well in the $NW_{1}^{1}NE_{1}^{1}$ of Section 19, T. 18 S., R. 27 E., please send me a copy of the notice for advertisement as you have sent it out.

Pursuant to your call of last Friday, I called Henry Meadows and suggested that he talk directly to you in order that you might get the necessary information direct and correct. In order to make the formal application coincide with the advertisement, I would appreciate it if you would send me a copy of the notice, and I will then mail the required formal application to you.

Thank you for taking care of this matter.

With best regards.

Very truly yours,

HERVEY, DOW & HINKLE

By Joward Bralton

HCB:db

CASE 2066:

Application of Humble Oil & Refining Company for an oil-gas dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Kathleen Steckel Well No. 1, located in the NW/4 NE/4 of Section 19, Township 18 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce oil from an undesignated Abo pool and gas from an undesignated Penrsylvanian pool through 4½-inch casing and 2 7/8-inch casing respectively cemented in a common well bore. Applicant proposes also to install tubing for the Abo production.

CASE 2067:

Application of Dorfman Production Company for an oil-gas dual completion. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Elizabeth Federal Well No. 1, located in Unit H, Section 18, Township 24 North, Range 7 West, Rio Arriba County, New Mexico, in such a manner as to permit the production of oil from the Escrito-Gallup Oil Pool and the production of gas from the Dakota Producing Interval.

CASE 2068:

Application of Gulf Oil Corporation for three non-standard gas proration units in the Jalmat Gas Pool. Applicant, in the above-styled cause, seeks an order establishing the following-described non-standard gas proration units in the Jalmat Gas Pool, Lea County, New Mexico:

- (1) A 320-acre unit consisting of the E/2 of Section 4, Town-ship 22 South, Range 36 East, to be dedicated to the J. F. Janda "F" Well No. 13, located 660 feet from the South and East lines of said Section 4.
- (2) A 480-acre unit consisting of the SE/4 of Section 33 and the SW/4 of Section 34, both in Township 21 South, Range 36 East and the NW/4 of Section 3, Township 22 South, Range 36 East, to be dedicated to its W. A. Ramsay "A" Well No. 1, located 330 feet from the South and West lines of said Section 34.
- (3) A 160-acre unit consisting of the SW/4 of Section 4. Township 22 South, Range 36 East, to be dedicated to the J. F. Janda "F" Well No. 7, located 1980 feet from the South and West lines of said Section 4.

DOCKET: EXAMINER HEARING, WEDNESDAY, SEPTEMBER 7, 1960

Oil Conservation Commission - 9 a.m., Mabry Hall, State Capitol, Santa Fe, N.M. The following cases will be heard before Elvis A. Utz, Examiner, or Oliver E. Payne, Attorney, as alternate examiner:

CASE 2062:

Application of Continental Oil Company for approval of an automatic custody transfer system to handle commingled production. Applicant, in the above-styled cause, seeks an order authorizing it to install an automatic custody transfer system to handle the production from the Weir Pool and the Cass Pool from certain wells located on that portion of the Southeast Monument Unit comprising Sections 15 and 23, Township 20 South, Range 37 East, Lea County, New Mexico.

CASE 2063:

Application of Texas National Petroleum Company for a gas-oil dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its Government Well No. 1, to be located 790 feet from the South and East lines of Section 16, Township 26 North, Range 11 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from the Galleges-Gallup Oil Pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 7/8-inch tubing and 4½-inch casing respectively cemented in a common well bore. Applicant proposes to also install 2 3/8-inch tubing for the Dakota production.

CASE 2064:

Application of Anderson-Prichard Oil Corporation and Amerada Petroleum Corporation for an extension of the vertical limits of the Justis-Drinkard Pool. Applicants, in the above-styled cause, seeks an order extending the vertical limits of the Justis-Drinkard Pool, to include the perforated intervals in its Carlson "A" Well Nos. I and 3; located respectively in Units J and N of Section 25, Township 25 South, Range 37 East, Lea County, New Mexico, and perhaps to include additional intervals in said pool.

CASE 2065:

Application of Texaco Inc. for an oil-gas dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing the dual completion of its H. J. Loe Federal "B" Well No. 3, located in Unit M, Section 23, Township 29 North, Range 12 West, San Juan County, New Mexico, in such a manner as to permit the production of oil from an undesignated Gallup oil pool and the production of gas from the Dakota Producing Interval through parallel strings of 2 3/8-inch casing and 4½-inch casing respectively, cemented in a common well bore. Applicant proposes to also install tubing for the Dakota production.

HIRAM M. DOW

CLARENCE E. HINKLE

CLARENCE E. HINKLE

CLARENCE E. HINKLE

CLARENCE E. HINKLE

J. SONDURANT, JR.

HOWARD E. HATTEN

S. B. CHRISTY IV

LEWIS C. COX, JR.

PAUL W. EATON, JR.

CONRAD E. COFFIELD

LAW OFFICES
HERVEY, DOW & HINKLE
HINKLE BUILDING

ROSWELL, NEW MEXICO

August 25, 1960

POST OFFICE BOX 547

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

Attention: Mr. Daniel S. Nutter Chief Engineer

Re: Examiner Hearing of September 7

Dear Dan:

Enclosed please find in triplicate Application of Humble for an oil-gas dual completion. This has been advertised as Case No. 2066 for the Examiner Hearing of Wednesday, September 7. Thank you for going ahead with the advertisement preceding the filing of this formal application.

My thanks also for the copy of the calculations going into the depth factor case.

With best personal regards.

Very truly yours,

HERVEY, DOW & HINKLE

By Somard

HCB:db

cc: Mr. Henry Meadows Attn: Mr. Willingham CH.

LAW OFFICES

J. M. HERVEY IS JAHOUS OF FICE OCC

HIRAM M. DOW & HINKLE

HINKLE BUILDING

W. E. BUILDING

W. E. BUILDING

ROSWELL, NEW MEXICO

HOWARD C. BRATTON

8:53

TELEPHONE MAIN 2-6510 POST OFFICE BOX 547

CONRAD E. COFFIELD

August 18, 1960

Re: APPLICATION OF HUMBLE OIL & REFINING COMPANY FOR AUTHORIZATION TO DUALLY COMPLETE ITS KATHLEEN STECKEL WELL NO. 1 IN THE NWANEL OF SECTION 19, TOWNSHIP 18 SOUTH, RANGE 27 EAST, EDDY COUNTY, NEW MEXICO, FOR PRODUCTION OF OIL FROM AN UNDESIGNATED ABO POOL THROUGH 4½-inch CASING WITH TUBING AND PRODUCTION OF GAS FROM AN UNDESIGNATED PENNSYLVANIAN POOL THROUGH 2 7/8-inch CASING, BOTH CASINGS CEMENTED IN A COMMON WELL BORE

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

Comes now Humble Oil & Refining Company and applies to dually complete its Kathleen Steckel Well Nc. 1 in the $NW_{\frac{1}{4}}^{\frac{1}{4}}NE_{\frac{1}{4}}^{\frac{1}{4}}$ of Section 19, Township 18 South, Range 27 East, Eddy County, New Mexico, in the following manner.

- l. The well will be completed with $4\frac{1}{2}$ -inch casing with tubing for production of oil from an undesignated Abo Pool, and will be completed with 2 7/8-inch casing for production of gas from an undesignated Pennsylvanian Pool. Both casings will be cemented in a common well bore.
- 2. Applicant respectfully requests an exception to the rules of the Oil Conservation Commission to permit the completion of the above well in the above described manner.

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3. It is requested that this application be set down for hearing before the Oil Conservation Commission at the first available Examiner hearing.

Respectfully submitted,

HUMBLE OIL & REFINING COMPANY

Hervey, Dow & Hinkle P. O. Box 547 Roswell, New Mexico

Attorneys for Applicant, Humble 011 & Refining Company

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO

In the Matter of:

CASE 2066 Application of the Humble Oil & Refining Company for an oil-gas dual completion utilizing two strings of casing. Applicant, in the above-styled cause, seeks an order authorizing it to dually complete its Kathleen Steckel Well No. 1, located in the NW/4 NE/4 of Section 19, Township 18 South, Range 27 East, Eddy County, New Mexico, in such a manner as to produce oil from an undesignated Abo pool and gas from an undesignated Pennsylvanian pool through $4\frac{1}{2}$ -inch casing and 2 7/8-inch casing respectively cemented in a common well bore. Applicant proposes also to install tubing for the Abo production.

> Mabry Hall September 7, 1960

BEFORE:

Elvis A. Utz, Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: Case 2066.

MR. PAYNE: Case 2066, "Application of Humble Oil & Refining Company for an oil-gas dual completion utilizing two strings of casing.

MR. BRATTON: Howard Bratton, Roswell, New Mexico, appearing on behalf of the Applicant. We have one witness and ask that he be sworn.

(Witness sworm in.)



DEARNLEY-MEIER REPORTING SERVICE, Inc.

ALBUQUERQUE, NEW MEXICO

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WITNESS			PAGE
J. E. WILLINGHAM	*	• · · · · * * * * * * * * * * * * * * *	
Direct Examination by Mr. Bratton Examination by Mr. Utz			3 7



(Thereupon, the documents were marked as Applicant's Exhibits One, Two and Three for Identification.)

J. E. WILLINGHAM

a witness, called by and on behalf of the Applicant, having first been duly sworn, was examined and testified as follows:

DIRECT EXAMINATION

BY MR. BRATTON:

- Q Will you state your name, address, and by whom you are employed?
- A J. E. Willingham, I live in Midland, Texas, I am employed by the Humble Oil and Refining Company.
- Q Have you previously testified before this Commission as an expert witness?
 - A Yes sir, I have.
- Q Are you familiar with the area under consideration in Case 2066 and the well involved in that application?
 - A Yes sir, I am.
 - Q Will you state what Humble's request is in Case 2066?
- A Basically, without going into minute details, we are planning to set 2 7/8 inch casing at 9500 feet as one string, and 4 1/2-inch casing at 5500 feet as another string, the upper string of 4 1/2 being in the Abo, the lower 2 3/8 in the Bend.
- Q Referring to Humble's Exhibit Number One, does it show the location of the well in question?



A Yes, this is a map that shows the location.

- Q Where is that location?
- A It's located in Eddy County, Texas --
- Q Where was that?
- A Excuse me, Eddy County, New Mexico, in Section 19, T 18 S, R 27 E.
 - Q The location of the well in the section is what?
- A It's 660 feet from the north line and 1980 feet from the east line.
- Q All right, sir. Now, refer to Humble's Exhibit Number Two, which is headed, "Humble Plan Number One, and state what that is.
- A This is a sample diagramatic sketch of the installation as planned. Actually, this well is already started. We have already set 13 3/8. We were in a river bottom and instead of setting it at fifty feet, we had to set it at 115, and we will set 9 5/8-inch casing at 1500 feet and drill an 8 3/4-inch hole below, and we have set 4 1/2 and 2 7/8 as I have previously outlined.
- Q All right, sir. What is your cementing program and centralizing program?
- A We will cement the casing through both strings since the two formations are quite a distance apart, and we will bring the cement on the 2 7/8-inch casing up to the bottom of the 4 1/2, and we will cement from the bottom of the 4 1/2 and bring the cement 600 feet above the uppermost pay.



Q This is a wildcat well both as to the Abo oil and as to the Pennsylvanian Bend gas?

A Yes, sir; actually, I didn't answer all of the question. We will centralize through all pays.

Q Excuse me. What type of centralizers have you decided to use, Mr. Willingham?

A We will either use turbolizers or just spiral-type stabilizers. There are several kinds on the market now that could be used; I hate to be tied down to one particular manufacturer because there's so many on the market.

- Q And satisfactory, in your opinion?
- A Yes, sir.
- Now, you are anticipating a Pennsylvania Bend gas at approximately 9500 feet?
 - A Yes, sir, that is correct.
 - Q And Abo oil at approximately 5500 feet?
 - A That's correct.
- Q Do you have anything else you care to say with relation to your proposed plan?

A No sir, I believe not. I think this is standard, it is what we have used in the past, and we have many installations like this in Texas and we have some in New Mexico, we have one in New Mexico and another one drilling similar to this one.

- Q Do you propose tubing in your Abo?
- There will be tubing in the Abo, yes sir.



Q All right, sir. Now, refer to your Exhibit Number Three, Mr. Willingham, and explain what that is, and --

A Exhibit Number Three is--we are presenting to the Commission not as a request, but this is a wildcat and we can't always ascertain what our exact conditions would be, and if we don't obtain a high volume gas well, we may want to switch the 4 1/2 and set it at 9500 and set the 2 7/8 up high.

- Q This is just presented as an alternative in case the Commission should be interested as to what you would propose in the event you got a high volume gas well?
 - A Yes, sir.
- Q In your opinion, would Plan Number Two work satisfactorily in the event you should encounter that situation?
 - A Yes sir, it would.
- Q Other than the switching of the two strings of casing, it would be --
 - A Basically the same.
 - Q --basically the same thing?
 - A Yes.
- Q Is there any other information which you would care to present to the Commission in connection with this proposal, Mr. Willingham?
- A No sir, I believe that all the information and the details were presented in the past, and I don't believe the Commission would want to be bothered with it.



Were Exhibits One through Three prepared by you or under your supervision? Yes sir, they were.

MR. BRATTON: We would offer Humble's Exhibits One through Three in evidence.

MR. UTZ: Without objection, Humble's Exhibits One through Three will be entered into the record.

MR. BRATTON: We have no further questions at this time. EXAMINATION BY MR. UTZ:

As I understand your cementing program, Mr. Willingham, you will have cement from TD to 600 feet above the uppermost pay of the two stages?

Yes sir, that's true. Α

And you don't anticipate any producing zones or portable water zones between 115 feet and 600 feet above the uppermost pay?

If you will notice, we are setting 9 5/8 at 1500. This 13 3/8 was set in the river bottom because of the work in the dirt formation.

Well, then I'll alter the inquiry to be from 600 feet above the uppermost pay to 1500 feet?

We do not anticipate any water.

And you will be able to artificially lift, in case need be, your zone?

Absolutely.

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



DEARNLEY-MEIER REPORTING SERVICE, Inc.

MR. PAYNE: Mr. Willingham, the case was advertised for Plan Number One only; it might be possible, however, to set up an administrative procedure in the event of approval whereby Plan Number Two could be approved upon notification of offset operators.

MR. BRATTON: If the Commission could, we would request that such an administrative approval be placed in the order, if the Commission sees it possible.

MR. UTZ: Are there other questions? The witness may be excused.

(Witness excused.)

MR. UTZ: Are there other statements in this case? If not, this case will be taken under advisement. We will take a ten-minute break.

(Short recess.)



STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, JERRY MARTINEZ, Notary Public in and for the County of Santa Fe, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings was reported by me in Stenotype and reduced to typewritten transcript by me, and that the same is a true and correct record of said proceedings to the best of my knowledge, skill and ability.

Dated at Albuquerque, New Mexico, this 10th day of September, 1960.

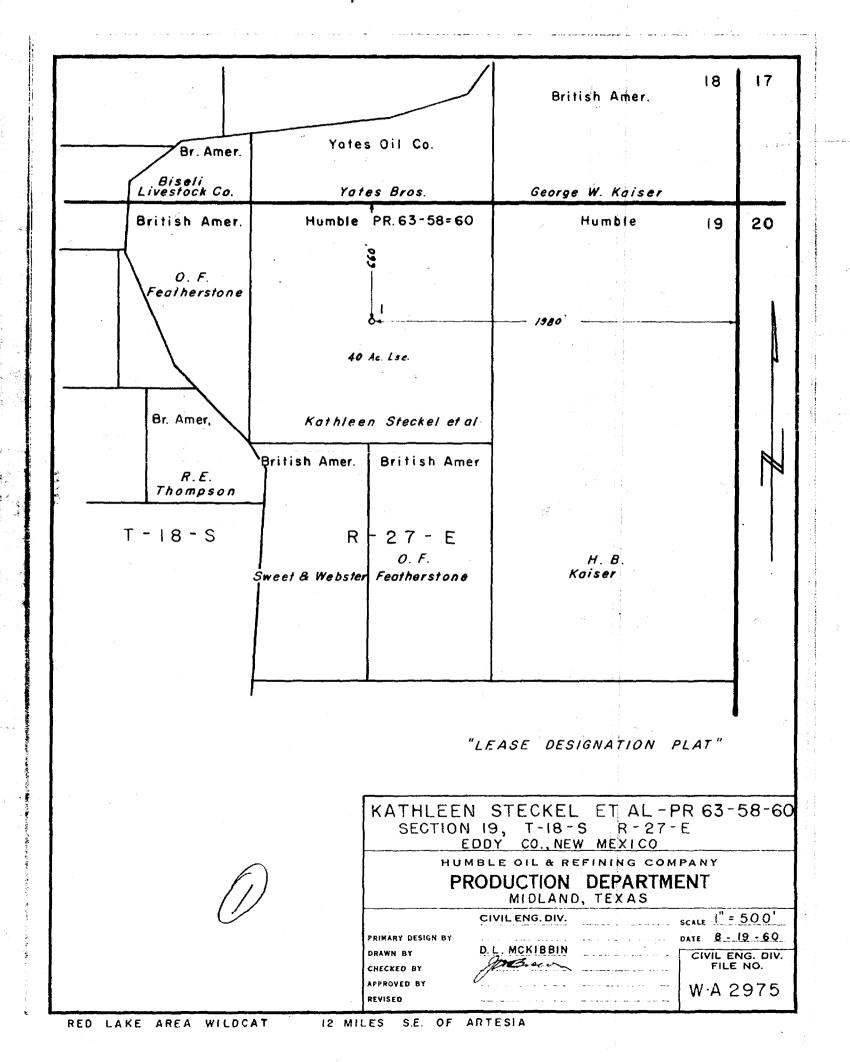
Notary Public

My Commission Expires: January 24, 1962

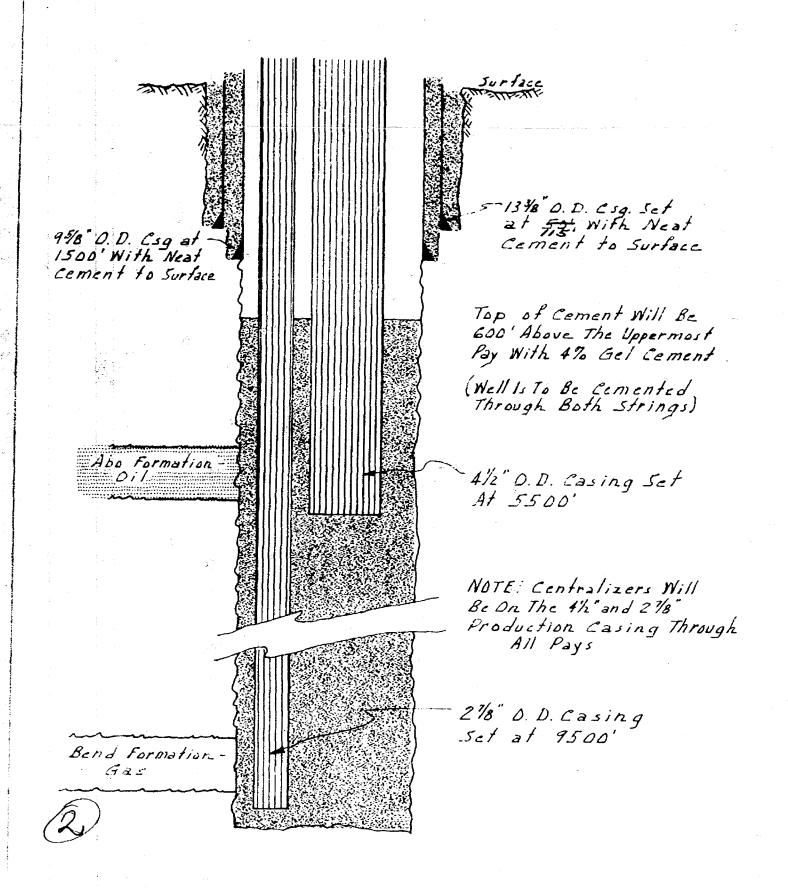
I do hereby certify that the foregoing is a complete record of the proceedings in the Examiner hearing of the He. 2066, heard by me was selected. 2. 1960.

New Mexico Oil Conservation Commission





PLAN - 1 KATHLEEN STECKEL



PLAN-2 KATHLEEN STECKEL

