BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO DECEMBER 12, 1950

IN THE MATTER OF:

GASE 2140 Application of Humble Oil & Refining Company for approval of the Worth Kirtland Unit Agree: ment. Applicant, in the above-styled cause, seeks approval of the North Kirtland Unit Agreement, which unit embraces 11,478 acres of Federal and State land in Township 30 Vorth, Range 14 West, San Juan, New Mexico.

BEFORE:

Elvis A. Utz. Examiner.

TRANSCRIPT OF PROCEEDINGS

MR. UTZ: The hearing will come to order. Case 2140.

MR. MOORE: Case 2140. Application of Humble 011 & Refining Company for approval of the North Kirtland Unit Agreement.

MR. BRATTON: Howard Bratton, appearing on behalf of the applicant. We have one witness, Royce Lawson, and I ask that he be sworn.

(Witness sworn)

MR. UTZ: Any other appearances? (No response) You may proceed.

HOYCE E. LAWSON, JR..

called as a witness, having been first duly sworn, testified as



follows:

DIRECT EXAMINATION

BY MR. BRATTON:

- Mr. Lawson, have you previously testified before this Commission?
 - A No, I have not.
- Will you state briefly your professional and educational background?
- A I am employed by Humble Oil & Refining Company, located in Roswell. I graduated from the University of Texas in 1949 with a B.S. degree in geology, and have been working in exploration for Humble since that time.
 - Q In what capacity, Mr. Lawson?
- A At present I am district geophysicist supervisor in Ros-well.
- Q Does your area cover the proposed North Kirtland Unit area?
 - A Yes, sir.
- Q Are you familiar with the area and with the application in the impending case?
 - A I am.
 - MR. BRATTON: Are the witness's qualifications acceptable?
 MR. UTZ: Yes, they are.

(Whereupon Applicant's Exhibit No. 1 marked for identification)



- Q We have asked to have marked as Exhibit No. 1 the north of the proposed North Kirtland Unit Agreement. Is this the form that is proposed at this time, Mr. Lawson?
 - A Yes.
 - Q The form of Unit Agreement has been tentatively approved?
 - A Yes.

(Whereupon, Applicant's Exhibit No. 2 marked for identification)

- Q Will you refer, then to Humble's Exhibit No. 2 which is a plat of the unit area, explain what it is and what it shows?
- A This is proposed North Kirtland Unit located in Township
 30 North, Range 14 West, in San Juan County, New Mexico. It embraces
 11,478.48 acres, more or less.
- Q And of that, some 9800 are Federal and 1600 acres are State land?
 - A Yes, that is right.
 - Q No fee lands involved?
 - A No fee lands.
- Q This shows the outline of the unit and also shows the proposed location of the test well under the Unit Agreement, is that correct?
 - A That is correct.
- Q All right, sir, it reflects the ownership within the Unit area?
 - A Yes.



- Q All right, sir, has this matter been submitted to the U.S. Geological Survey for tentative approval?
 - A Yes, it has.
 - Q And have you received a response?
 - A It has been approved by the U.S.G.S.

(Whereupon, Applicant's Exhibit No. 3 marked for identification)

- Q That is shown by Exhibit No. 3 which is a letter from the Director of the U.S.G.S. tentatively approving the Unit Agreement as to the form and content of designation therein?
 - A Yes.
- Q Is the Unit Agreement which has been proposed in standard form for a Federal participating type Unit Agreement, Mr. Lawson?
 - A Yes.
- Q Have you received tentative approval as to designation of the area and form and content of the Unit Agreement from the Land Commissioner?
 - A Yes.
- Q There has not been a final approval due to unavoidable delays in processing?
 - A I believe that is right.

(Whereupon, Applicant's Exhibit No. 4 marked for identification)

Q Referring now to your Exhibit No. 4, Mr. Lawson, that is the geolo ical report which was submitted to the United States



Geological Survey and the State Land Commissioner in connection with this unit, is that correct?

- A Yes, that is correct.
- Now, will you go through beiefly, do not detail everything in that report, but go through briefly and state what it shows as to the formation location of objective well and the objective of the well?

All right, sir. The geological report of North Kirtland area shows first a location plat locating the unit on the small vision regional scale map. It locates the proposed unit area in respect to nearby towns and producing fields. It also shows a cross section which also includes the line of cross section which is also included in the report. The text of the geological report discusses the geology of the general area, the purpose for forming this unit, and the location, and in the geological desceiption the objectives of each geological horizon discussed, and the general stratigraphy, the lithology of the various geological formations would be penetrated and the thicknesses. Also a plan development is proposed and along with the recommendations for the unit area, and included in the report is a Mississippian depth map, which reflects the attitude of Mississippian formation as does the map from reflex seismograph data. This survey was conducted in 1948 and 149 by Humble.

- Q Excuse me, Mr. Lawson. Was it '43 and '49 or '58?
- A Excuse me, '58 and '59, the latter part of 1958 and



first two months of 1959. Also included is a cross section, north-south cross section geologically showing the objectives and the estimated depth of the various formations that will be encountered.

- Q Mr. Lawson, this is based on seismic information due to the fact there are very few wells in the San Juan Basin drilled to this depth, is that correct?
 - A That is correct.
 - Q This will certainly be a significant test?
- A The San Juan Basin itself will be a significant test, and very important, yes, sir.
 - What depth, 12,500?
- A 12,500, the objective is Mississippian Madison Dolomite it is either 12,500 for the test or the Mississippian Madison whichever is the shallower.
- Q Based upon your present information, Mr. Lawson, is the unit area as proposed sufficiently large enough to cover or include the structure which you have found in your seismic operation?
- A We believe that the outline adquately covers the seismic structure.
- Well will be drilled to the Mississippian.
- A That is correct, within six months after the effective date of the unit.
- Q What is your intent Mr. Lawson, with respect to commitment of the working interest to the Unit?



- A Humble owns or controls approximately 65 percent of the lease within the unit and we have contacted our additional 20 to 25 percent of the leaseholders. We feel like we can, from allocations that we will have from 90 to 100 percent participation within the unit area.
- Q Will this be sufficient to give you adequate control of the unit area and provide for orderly exploration and development of the unit area?
 - A Yes.
- Q Do you have any information as to the probable cost of the test well?
- A At this depth in this area, it will probably cost us between three hundred and to four hundred thousand dollars.
- Q In the event the proposed unit agreement is approved, do you believe its approval would be in the interest of conservation and protection of correlative rights?
 - A Yes.
- Q were Exhibits 2 and 4 prepared by you or under your supervision?
 - A Under my supervision.
- And Exhibit 1 is the proposed information form of agreement, and Exhibit 3 is the copy of approval of U.S.G.S. of the Unit?
 - A Yes.
- Q Do you have anything else you would care to bring out in connection with this matter, Mr. Lawson?



A No, unless there are some questions.

MR. BAATTON: We would offer 1 through 4 in evidence.

MR. UTC: Without Objection, 1 through will be entered in the record.)

(Whereupon, Applicant's Exhibits 1 through 4 received in evidence.)

CROSS EXAMINATION

BY MR. UTZ:

- Q What was the location of your proposed unit?
- A The tentative location is Section 11, 980 from the South and East lines.

MR. UTZ: Any other questions?

MR. PAYNE: Yes.

BY MR. PAYNE:

- Q Lawson, is it?
- A Yes.
- Q Mr. Lawson, does the agreement show expansion and contraction of unit area?
 - A Yes.
 - Q You don't feel your proposed unit is overly large, do you?
 - A No, sir.
 - Q Now, you are unitizing at all depths?
 - A All depths, yes, sir.
 - Q Are any wells completed in this area at any depth now?
 - A Not within the unit outline there is some outside of the



- Q Now, could you explain briefly what the participant formula after discovery is?
 - A I am not clear on that.
- Q Well, it does provide you will have a separate participating area for each separate pool, doesn't it?
 - A I believe that is correct.
- Q I am not sure either, but it looks like it's on the basis of acreage in the participating area.

MR. BRATTON: If I might answer Mr. Payne's question, I believe that is correct, Mr. Payne, it's a participating area in each formation or each reservoir, and it is on the basis of the acreage within the participating area dedicated to the well or wells within that participating area.

Q (By Mr. Payne) You have every reason to believe allroggalties tions at this time are by governmental approval in the unit area?

A Yes.

MR. UTZ: Any other questions? (No response) If not, the witness may be excused.

(Witness excused)

MR. UTZ: Any statements in this case? (No response) Case will be taken under advisement.



STATE OF NEW MEXICO)

(COUNTY OF BERNALILLO)

I, LLEWELYN NELSON, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine short-hand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

NOTARY PUBLIC

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My Commission expires:

June 14, 1964

I do hereby certify that the foregoing is a complete route of the proceedings in the hammader beautiful of Case No. 21.40,

New Mexico Cil Conservation Commission



ALBUQUERQUE, NEW MEXICO

BEFORE THE OIL CONSERVATION COMMISSION SANTA FE, NEW MEXICO DECEMBER 12, 1960

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Agreement, which unit embraces 11,478 acres of
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Range 14 West, San Juan, New Mexico.

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- A We believe that the outline adquately covers the seismic structure.
- Q You said under the terms of the Unit Agreement, one test well will be drilled to the Mississippian.
- A That is correct, within six months after the effective date of the unit.
- Q What is your intent Mr. Lawson, with respect to commitment of the working interest to the Unit?



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Case will be taken under advisement.



STATE OF NEW MEXICO)

COUNTY OF BERNALILLO)

I, LLEWELYN MELSON, Court Reporter, in and for the County of Bernalillo, State of New Mexico, do hereby certify that the foregoing and attached Transcript of Proceedings before the New Mexico Oil Conservation Commission was reported by me in machine shorthand and reduced to typewritten transcript under my personal supervision, and that the same is a true and correct record to the best of my knowledge, skill and ability.

WITYESS my Hand and Seal this, the day of day of day of Mew Mexico.

NOTARY PUBLIC

My Commission expires: June 14, 1964

I do hereby certify that the foregoing is a complete rised of the proceedings in the Exciser hand of the proceedings in heard by we on the complete of the proceedings in the Examiner New Meyico Oil Conservation Commission

