BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

IN THE MATTER OF THE APPLICATION OF KEWANEE OIL COMPANY FOR PERMISSION TO CONVERT TO A PRODUCER, FOR THE PRODUCTION OF OIL AND GAS, ITS BAISH "B" I.P. WELL NO. 30, LOCATED IN THE SWC SW NW NW NEW SECTION 27-175-32E, LEA COUNTY, NEW MEXICO.

CASE	NO.	

APPLICATION

Comes now Kewanee Oil Company, a Delaware Corporation, duly licensed to transact business in the State of New Mexico, and would respectfully show to the Commission:

- 1. That it is engaged in the oil producing business and owns and operates producing oil and gas leases in the State of New Mexico, among which are its lease properties in what is known as the Maljamar Oil Field of Lea County, New Mexico, including a lease on the tract of land on which it desires to convert its Baish "B" I.P. well #30, gas input well, to a producer for the production of oil and gas. This well is located in the SWC SW4 NW4, Section 27-17S-32E, Lea County, New Mexico, the exact location of which is shown on a surveyors plat attached hereto as part of "Exhibit A", together with copy of formal notice filed with the United States Department of the Interior, Geological Survey, at the time said well was drilled, also part of Exhibit A.
- 2. Applicant herein states that, in connection with the operation of this lease property in the aforesaid oil field, on or about the 5th day of August, 1941, an agreement and program was entered into with other operators of the said Maljamar Oil Field, for the purpose of a cooperative gas injection program. This project was designated the Maljamar Cooperative Repressuring Agreement, for brevity also referred to as MCRA.
- 3. Applicant states that under the aforesaid MCRA, which was approved by the United States Department of the Interior, Geological Survey, Kewanee Oil Company's Baish "B" well #9, located 1980 feet from the north line and 660 feet from the west line (CSW¹/₄ NW¹/₄) of Section 27-17S-32E, Lea County, New Mexico, was converted into a gas input well on April 17, 1942 and from that date until October 4, 1946, 292,549,000 cubic feet of gas has been injected into this well. Injection was discontinued on the above referred to date to permit the laying of a new gas injection system and the

enlargement and revamping of the pressure maintenance plant connected with the injection project.

For the information of the Commission, this well had been completed for production on May 1, 1940, at a total depth of 4036 feet, with an initial production of 125 barrels per day. That the completion of this well reflected a well developed sixth zone, from 3836' to 3889'. Additional pay horizons were encountered in the lower San Andres section. The seventh zone carried good porosity and saturation from 3894' to 3954', and the eighth zone was well developed from 3980' to 4036'. The wells immediately offsetting Baish "B" #9 are also producing from both the Grayburg and San Andres sections. That situation was the reason that Baish "B" #9, now Baish "B" I.P. #9, was selected as a gas injection well by the Maljamar Cooperative Repressuring Agreement.

4. Applicant further states that the aforesaid well, Baish "B" #9, now designated Baish "B" I.P. #9, has demonstrated by performance the fact that it has been and is an exceptionally good gas injection well, as the benefits derived therefrom are best reflected in the following figures, to-wit:

From September, 1942 to January, 1947, the four producing wells immediately offsetting this gas injection well, namely Baish B #6, Baish B #4, Baish B #19 and Baish B #22, have produced 219,034 barrels of oil. During the same period bottom hole pressure on these same four wells only declined from an average of 1100 barrels per square inch to 1019 barrels per square inch, or an average well decline of 81 barrels. This decline represents .37 pounds pressure decline per 1000 barrels of oil produced. As of January 1, 1947, the gas—oil ratios on these same four wells averaged only 712 cubic feet per barrel.

From these figures it appears that exceptional results have been obtained from Baish B #9 as an input well, and that therefore its continuation as such is most definitely desired in order to assure maximum recovery.

5. Applicant states that in November, 1946, in accordance with a supplemental plan for drilling and reconditioning of injection wells, under the MCRA, approved by the United States Department of the Interior, Geological Survey, it commenced its Baish "B" I.P. #30, located 2600 feet from the north line and 25 feet from the west line (SWC SW\(\frac{1}{4}\) NW\(\frac{1}{4}\)) of Section 27-17S-32E, Lea County, New Mexico, (Las Cruces 057210), which well was drilled for the purpose of using same as an input well. That this well was completed on January 30, 1947, at a total depth of 4088 feet and swabbed 140 barrels of oil per day on test without shooting. That in drilling this well there was drilled a well developed 6th zone, but little or no saturation was

encountered in the lower San Andres section. The seventh zone carried scattered porosity and saturation, and the 8th zone was entirely barren. This well, completed at 4088 feet, was some 50 or 60 feet above the water table, as found in this particular area. Therefore, as the San Andres pay sections were absent in this well, applicant considers, from the result and information from the drilling of said well, that maximum benefit to the gas injection program could not be obtained in utilizing this well for gas input service in preference to Baish "B" #9, which well by performance has demonstrated its value as to its use for input service.

- 6. Applicant further states that under the injection program of the MCRA, the owners and operators of such agreement agreed that owners and operators of tracts of land upon which gas injection wells were located should have the right to an additional compensating well for oil and gas on each 40-acre unit, if permission to do so could be obtained so that such operators could have a producing well on each 40-acre legal subdivision, in addition to the well being used as a gas injection well.
- 7. Applicant states that approval has been obtained from the United States Department of Interior, Geological Survey, for the conversion of the said Baish "B" I.P. #30 into a producer for the production of oil and gas, subject to approval of the resulting unorthodox well location by the New Mexico Oil Conservation Commission, and for the continuation of Baish "B" I.P. #9 as an input well and for designation of Baish "B" I.P. #30 as Baish "B" #30. Photostat copy of the application and approval of the United States Department of Interior, Geological Survey, is attached hereto as "Exhibit B".
- 8. Applicant further states that no other lease operators are affected by the unorthodox location of the well in question, which fact is reflected by the plat covering the Maljamar Cooperative Repressuring area, attached hereto as "Exhibit C".

WHEREFORE, applicant prays that the Commission set a date for a hearing on this application, and upon hearing, if proper showing is made, enter its order approving conversion of the said Kewanee Oil Company's Baish "B" I.P. #30 into a producer for the production of oil and gas, on the unorthodox location as aforesaid, and for the designation of said Baish "B" I.P. #30 as Baish "B" #30.

Respectfully submitted,

KEWANEE OIL COMPANY

By WO albert

ACKNOWLEDGMENT

STATE OF OKLAHOMA)	88.
COUNTY OF TULSA)	

I, W. O. ALBERT, being first duly sworn upon oath, state: I am Ass't Superintendent of Kewanee Oil Company, a corporation; and I have read and understand the contents of the foregoing application and the facts therein alleged are true and correct.

SARSORIBED AND SWORN TO before me this 30 day of October, A.D.

commission expires:

Dec. 15, 1948