KEWANEE OIL COMPANY

P. O. BOX 3786 Odessa, Texas

WEST TEXAS DIVISION

November 18, 1964

PRODUCTION DEPARTMENT

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Mr. A. L. Porter, Jr. Secretary - Director New Mexico Oil Conservation Commission P. O. Box 871 Santa Fe, New Mexico

Dear Sir:

Enclosed is application along with information required under Rule 701 requesting administrative approval for expansion of the Dayton Grayburg Waterflood by converting Williams Number 4 to water input duty.

A copy of application with all attachments has been forwarded to the State Engineers Office, Capitol Building, Santa Fe, New Mexico.

Correspondence pertaining to subject application should be addressed to Kewanee Oil Company, P.O. Box 3786, Odessa, Texas.

Commission Form C-120 has been substituted for Form C-116 to show production of Williams No₀ 4 prior to and after response from water injection.

Yours very truly,

- El Struceano

E. F. Strickland Division Superintendent

EFS:BCN:lg Enclosures:

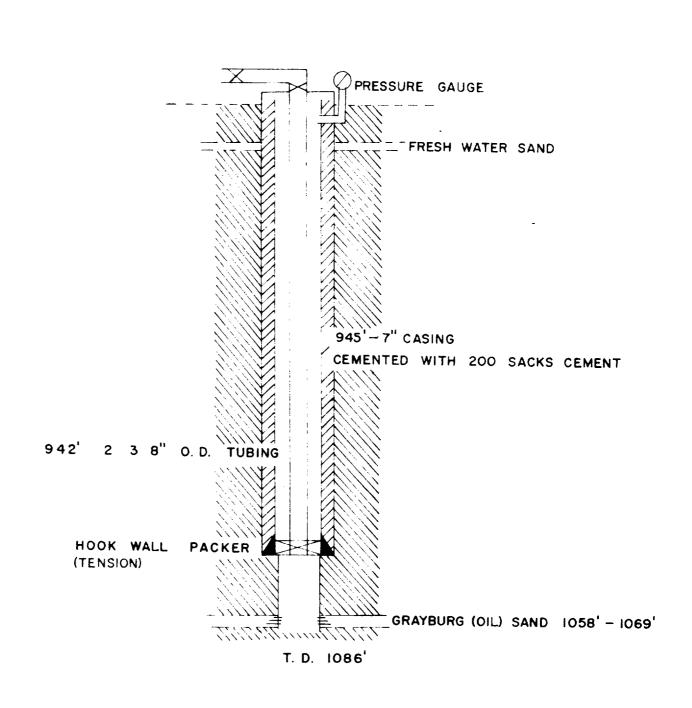
1. Application

- 2. Exhibit A Plat Grayburg Field
- 3. Exhibit B Diagrammatic Sketch of proposed injection well.
- 4. Exhibit C Drillers log of Williams No. 4
- 5. Exhibit D Forms C-120

cc: New Mexico State Engineers Office, Santa Fe, New Mexico Oil Conservation Commission, Artesia, New Mexico ой Коу 23 Ан 8 со

KEWANEE OIL COMPANY DAYTON GRAYBURG FIELD EDDY COUNTY, NEW MEXICO

EXHIBIT B PROPOSED WATER INPUT WELL



WILLIAMS NUMBER 4 SE 4 OF NW 4 SECTION 25 T-18-N, R-26-E

EXHIBIT C

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WILLIAMS NUMBER 4

DRILLERS LOG

Depth		Formation
From	To	
0	80	Gyp and fine river sand
80	100	Water sand
100	130	Soft Gyp rock
130	208	Gyp with red streaks of Clay
208	835	Gyp rock, streaks of red sand and clay
835	947	Soft lime rock, streaks red sand
947	950	Hard gray lime rock
950	958	Gray lime
958	966	Gray lime
966	9 7 5	Hard gray lime
975	985	Dark gray lime
985	1000	Gray lime
1000	1022	Dark gray sandy lime
1022	1028	Gray sandy lime
1028	1040	Gray and brown lime
1040	1047	Mixed red sand and lime
1047	1052	Lime and red sand
1052	1058	Sand`and red rock
1058	1060	Mixed sand
1060	1064	Sand - Oil show
1064	1069	Sand and lime
1069	1086	Gray lime
	1086	Total Depth

BEFORE THE NEW MEXICO OIL CONSERVATION COMMISSION

APPLICATION OF KEW ANEE OIL COMPANY FOR ADMINISTRATIVE APPROVAL FOR EXPANSION OF WATERFLOOD PROJECT, EDDY COUNTY, N. M.

. .

NO._____

COMES NOW, Kewanee Oil Company and applies to the New Mexico Oil Conservation Commission for administrative approval for expansion of a waterflood project, now in operation in the Dayton Grayburg Field, Eddy County, New Mexico, and in support of its application, states:

1. That the applicant, Kewanee Oil Company, is the /, $\mathcal{J} \vee^{\mathcal{V}}$ owner and operator of the Williams lease comprising 320 acres, more or less, being the North One-half, (N/2), of Section 25, Township 18 bouth, Range 26 East, Eddy County, New Mexico. Applicant, Kewanee Oil Company, is also the owner and operator of other leases in the Dayton Grayburg Field, the McCall lease, comprising 80 acres, more or less, being the West One-half, (w/2), of the Southwest Quarter, (SW /4), of Section 24, and the Scripps lease comprising 40 acres, more or less, being the Northwest Quarter, (NW /4), of the Southwest Quarter, (SW /4), of Section 25, Township 25 North, Range 26 East, Eddy County, New Mexico.

2. That said leases are presently developed by six producing wells and one water injection well in the Dayton Grayburg Field, located in Unit M of Section 24 and Units B, C, D, F and L of Section 25.

3. That Kewanee Oil Company is presently injecting water into the Dayton Grayburg Field utilizing Williams Number 6, Unit B, of Section 25 as the water injection well. The present injection rate is 58 barrels of water per day at 800 psi surface pressure into Williams No. 6. Kewanee Oil Company proposes to convert Williams Number 4, Unit F, of Section 25, to water injection duty. The location of the existing wells is shown on the plat attached to this application and incorporated herein by reference. 4. That water injection into the Dayton Grayburg Field utilizing Williams Number 6 was originally authorized by Commission Order Number R-2720, entered in Case Number 3061.

5. That Kewanee Oil Company proposes to inject water through Williams Number 4 in addition to the original approved injection well, Williams Number 6, into the Premier Sand at a depth of 1058' in the Grayburg Formation of the Dayton Grayburg Field, and to produce oil from said field through the three producing wells on the Williams Lease, one well on the McCall Lease and one well on the Scripps Lease.

6. That Williams Number 4 has experienced response to water injection and is a direct offset to the present water injection well, Williams Number 6. Williams Number 4 is currently producing less than 0.25 barrels of oil per day and 4.0 barrels of water per day compared to a daily production of 1.65 barrels of oil and no water prior to response from water injection as evidenced by the forms C-120 attacned to this application and incorporated herein by reference.

7. That in view of present low injection rate of 58 barrels of water per day into Williams Number 6, the approval of subject well for water injection is necessary to obtain a thorough and efficient sweep of oil by waterflood in a reasonable length of time.

8. That approval of subject application will prevent waste and protect correlative rights.

9. That if subject application is approved it will be subject to stated stipulations contained in letter dated June 3, 1964, from Mr. E. Porter, Jr., Secretary - Director to Mr. Richard S. Morris, of Seth, Montgomery, Federici and Andrews, as pertains to original approval for the Kewanee Dayton Grayburg Waterflood Project. 10. That anticipated volume of water injection into Williams Number 4 will be 150 barrels per day at maximum surface pressure of 800 psi. Water injected will be from the shallow Artesian Basin from a water supply well equipped in the area. The subject water injection well will be equipped to confine the injection water to the cil productive interval of the Premier Sand. The proposed completion method for Williams Number 4 is indicated in Exhibit B attached to this application and incorporated herein by reference.

WHEREFORE, the applicant, Kewanee Oil Company, requests that this application be approved by Administrative Procedure and that the Commission enter its Order approving the proposed expansion of the waterflood project.

NEW MEXICO OIL CONSERVATION COMMISSION MONTHLY INJECTION REPORT

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Form & 120 3 (Revised 5-1-60)

Submit this report in triplicate to the District Office, Oil Conservation Commission

COMPANY					mpany	POOL Dayton Grayburg									
COUNTY	Edd	_			MONTH July 12-6										
					IN	JECTION WELLS			HAL						
	Well			ion	MCF Gas	Cumulative	Bbls Water	Cumulative	Ave. Inj.						
Lease	No.			TR	Injected	Gas Inj.	Injected	Water Inj.	Pressures						
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				NEW MEXICO SERVATION COM	Form C-120 (Revised 5-1-60)			
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	Lease		Well Loc No. UL S	ation Da T R of T	te Length est of Test	Barrels t Produced	Barrels Per Day	
N	one							



Form C-120 (Revised 5-1-60)

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Submit this report in triplicate to the District Office, Oil Conservation Commission.

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STATE OF NEW MEXICO

STATE ENGINEER OFFICE

SANTA FE

S. E. REYNOLDS STATE ENGINEER

December 1, 1964

ADDRESS CORRESPONDENCE TO: STATE CAPITOL SANTA FE, N. M.

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Mr. A. L. Porter, Jr. Secretary-Director Oil Conservation Commission Santa Fe, New Mexico

Dear Mr. Porter:

Reference is made to the application of Kewanee Oil Company which seeks administrative approval for expansion of their Dayton Grayburg Waterflood by converting their Williams No. 4 well to water injection. Mr. Strickland states in his paragraph numbered 9. "That if subject application is approved it will be subject to stated stipulations contained in letter dated June 3, 1964, from Mr. A. L. Porter, Jr., Secretary-Director to Mr. Richard S. Morris, of Seth, Montgomery, Federici and Andrews, as pertains to original approval for the Kewanne Dayton Grayburg Waterflood Project."

In view of this statement of the provisions contained in your letter dated June 3, 1964 (referred to in the statement) this office offers no objection to the granting of this application.

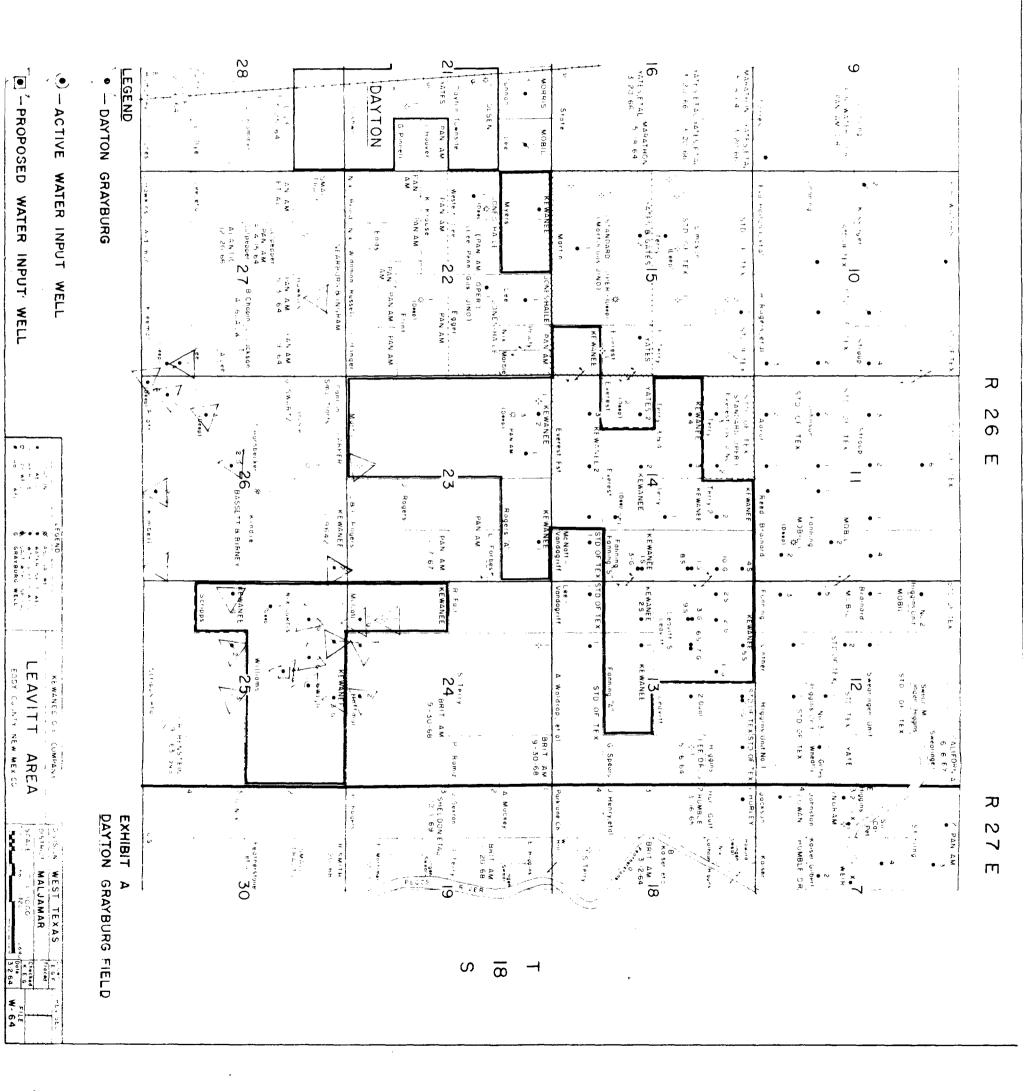
Yours truly,

S. E. Reynolds State Engineer

By: Frank E.

Chief Water Rights Div.

FEI/ma cc-Kewanee Oil Co. F. H. Hennighausen



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