Entered November 4, 1976

## BEFORE THE OIL CONSERVATION COMMISSION OF THE STATE OF NEW MEXICO

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

> CASE NO. 5786 Order No. R-5317

APPLICATION OF TEXACO INC. FOR A WATERFLOOD PROJECT, LEA COUNTY, NEW MEXICO.

## ORDER OF THE COMMISSION

## BY THE COMMISSION:

This cause came on for hearing at 9 a.m. on October 13, 1976, at Santa Fe, New Mexico, before Examiner, Richard L. Stamets.

NOW, on this <u>4th</u> day of November, 1976, the Commission, a quorum being present, having considered the testimony, the record, and the recommendations of the Examiner, and being fully advised 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, Texaco Inc., seeks authority to institute a waterflood project on its New Mexico "BZ" State Lease, Langlie-Mattix Pool, by the injection of water into the Seven Rivers-Queen formation through six injection wells in Units B, D, F, H, J, and P of Section 16, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico.

(3) That the wells in the project area are in an advanced state of depletion and should properly be classified as "Stripper" wells.

(4) That the proposed waterflood project should result in the recovery of otherwise unrecoverable oil, thereby preventing waste.

(5) That the evidence presented indicates that the Coquina Oil Corporation Texaco State Well No. 1 in Unit P and the Imperial-American Management Company Elk State No. 2 in Unit M, both in said Section 16, are not cemented through the Langlie Mattix producing interval. -2-Case No. 5786 Order No. R-5317

(6) That the annular space between the casing and the hole in the wells described in Finding No. (5) above could serve as an avenue of water migration from the Langlie Mattix zone to other zones or to the surface.

(7) That to prevent such migration of water from the Langlie Mattix zone, the wells described in Finding No. (5) above should be cemented in accordance with Rule 107(a), Commission Rules and Regulations, before injection by pressure greater than hydrostatic should take place through offsetting project injection wells.

(8) That the applicant proposes to run cement bond logs on its following listed wells and to recement any such well not adequately cemented across and above the Langlie Mattix zone:

LEASE	E NAMI	-		WELL NO.	UNIT	SECTION	TOWNSHIP	RANGE
N.M.	"BZ"	State	NCT-8	2	F	16	235	37E
N.M.	"BZ"	State	NCT-8	3	J	16	235	37E
N.M.	"BZ"	State	NCT-8	15	J	16	235	37E
N.M.	"DC"	State		1	K	16	235	37E

(9) That the wells within the project should be equipped to facilitate periodic testing of the annular space between strings of production and surface casing.

(10) That the operator should take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the surface from injection, production, or plugged and abandoned wells.

(11) That the subject application should be approved and the project should be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

## IT IS THEREFORE ORDERED:

(1) That the applicant, Texaco Inc., is hereby authorized to institute a waterflood project on its New Mexico "BZ" State Lease, Langlie-Mattix Pool, by the injection of water into the Seven Rivers-Queen formation through the following-described wells, all in Section 16, Township 23 South, Range 37 East, NMPM, Lea County, New Mexico:

LEASE NAME		WELL NO.	UNIT LETTER
New Mexico "BZ"		2 3	F J
New Mexico "BZ" New Mexico "BZ"		6	B
New Mexico "BZ"	State	8	D
New Mexico "BZ" New Mexico "BZ"		7 10	H P

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(2) That injection into each of said wells should be through internally coated tubing, set in a packer which shall be located as near as practicable to the uppermost perforation; that the casing-tubing annulus of each injection well shall be tested for leaks, be loaded with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device, and that the injection wells or system shall be equipped in such a manner as to limit wellhead pressure to no more than 700 psi.

(3) That the Secretary-Director of the Commission may administratively authorize a pressure limitation in excess of 700 psi upon a showing by the operator that such higher pressure will not result in fracturing of the confining strata.

(4) That the wells within the project area shall be equipped with risers or in another acceptable manner such as to facilitate the periodic testing of the bradenhead for pressure or fluid production.

(5) That before the New Mexico "BZ" State NCT-8 Wells No. 2 in Unit F and 3 in Unit J of said Section 16 may be converted to injection, the operator shall cause cement bond logs to be run on such wells and shall further cause any such well found to be inadequately cemented across and above the Langlie-Mattix zone to be recemented therethrough.

(6) That within 6 months after initiation of injection within the project the operator shall cause cement bond logs to be run on its New Mexico "BZ" State NCT-8 Well No. 15 in Unit J and its New Mexico "DC" State Well No. 1 in Unit K of said Section 16 and shall further cause any such well found to be inadequately cemented through the Langlie-Mattix zone to be recemented therethrough.

(7) That the operator shall notify the Commission's Hobbs district office of the date and time of operations required by Order (5) and (6) of this Order so that the Commission may at its option witness such operations.

(8) That prior to initiation of injection under pressure greater than hydrostatic pressure into injection wells within the project directly or diagonally offsetting the Coquina Oil Corporation Texaco State Well No. 1 in Unit P and Imperial-American Management Co. Elk State Well No. 2 in Unit M of said Section 16, such wells must be cemented through and above the Langlie-Mattix zone to a depth sufficient to prevent the upward migration of fluids through the casing-hole annulus in such wells. -4-Case No. 5786 Order No. R-5317

(9) That the operator shall immediately notify the supervisor of the Commission's Hobbs district office of the failure of the tubing or packer in any of said injection wells, the leakage of water or oil from around any producing well, the leakage of water or oil from any plugged and abandoned well within the project area or any other evidence of fluid migration from the injection zone, and shall take such timely steps as may be necessary or required to correct such failure or leakage.

(10) That the subject waterflood project is hereby designated the Texaco "BZ" Langlie-Mattix Waterflood Project and shall be governed by the provisions of Rules 701, 702, and 703 of the Commission Rules and Regulations.

(11) That monthly progress reports of the waterflood project herein authorized shall be submitted to the Commission in accordance with Rules 704 and 1120 of the Commission Rules and Regulations.

(12) That jurisdiction of this cause is retained for the entry of such further orders as the Commission may deem necessary.

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

> STATE OF NEW MEXICO OIL CONSERVATION COMMISSION

PHIL R. LUCERO, Chairman

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m ON Member & Secretary JOE D. RAMEY,

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