STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION

IN THE MATTER OF THE HEARING CALLED BY THE OIL CONSERVATION DIVISION FOR THE PURPOSE OF CONSIDERING:

CASE NO. 13503
ORDER NO. R-12394

APPLICATION OF APACHE CORPORATION FOR APPROVAL OF A WATERFLOOD PROJECT AND QUALIFICATION OF THE PROJECT AREA FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE "ENHANCED OIL RECOVERY ACT", LEA COUNTY, NEW MEXICO.

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on June 16, 2005, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this day 22nd of July, 2005, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) Division Cases No. 13503 and 13504 were consolidated at the hearing for the purpose of testimony.

(3) The applicant, Apache Corporation ("Apache" or "applicant"), seeks authority to institute a waterflood project within its East Blinebry-Drinkard Unit Area ("Unit Area"), described below, by the injection of produced water into the Blinebry and Drinkard formations, Drinkard and Blinebry Oil & Gas Pools, Lea County, New Mexico, through seventeen (17) initial injection wells to be located within the Unit Area, all as shown on Exhibit "A" attached to this order:

TOWNSHIP 21 SOUTH, RANGE 37 EAST, NMPM

Section 1:	Lots 11 through 15, SW/4, W/2 SE/4
Section 11:	E/2, NW/4
Section 12:	W/2, W/2 E/2
Section 13:	W/2, W/2 NE/4, NW/4 SE/4
Section 14:	NE/4, E/2 SE/4

(4) BP America Production Company, a working interest owner in the East Blinebry-Drinkard Unit, appeared at the hearing through legal counsel but offered no evidence or testimony in this proceeding.

(5) The Unitized Interval within the Unit Area comprises the Blinebry, Tubb and Drinkard formations and occurs at a depth of 5,615 feet to 6,795 on the type log for the Apache Lockhart B-11 Well No. 17 (API No. 30-025-06536) located 1980 feet from the North and East lines (Unit G) of Section 11, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(6) Apache proposes to inject into the Blinebry and Drinkard formations within the Unit Area by means of a five spot injection pattern.

(7) The Blinebry and Drinkard formations within the Unit Area are in an advanced state of depletion and are suitable for waterflooding. The Tubb formation is predominantly gas bearing within the Unit Area, and development of this interval thus far has been limited to portions of Sections 13 and 14.

(8) All of the "area of review" wells within the Unit Area appear to be cased and cemented, and/or plugged and abandoned adequately so as to preclude the movement of injected fluid from the proposed injection interval to other formations or fresh water sources.

(9) The proposed waterflood project should result in the recovery of an additional 3.465 million barrels of secondary oil reserves from the Unitized Interval within the Unit Area.

(10) Apache estimates that it will cost approximately $2.428 million dollars to implement waterflood operations within the Unit Area.

(11) Approval of the proposed waterflood project will result in the recovery of additional secondary oil and gas reserves that would otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(12) Injection into the Unitized Interval should be limited to the oil-bearing portions of the Blinebry and Drinkard formations. The applicant should be required, insofar as is practical, to avoid injection into any gas-bearing zones within any or all of the three formations within the Unitized Interval, and should otherwise take steps as may be necessary to protect these gas-bearing intervals.

(13) Prior to commencing injection operations into the Elliot-Monterey Well No. 5 (API No. 30-025-06334), the Lockhart B-11 Well No. 4 (API No. 30-025-06476), the Lockhart B-11 Well No. 6 (API No. 30-025-06527), the Lockhart B-11 Well No. 17 (API No. 30-025-06536) and the Lockhart B-12 Well No. 4 (API No. 30-025-06539), the deeper perforations below the Unitized Interval in each of these wells should be squeeze cemented or otherwise isolated by a method approved by the Hobbs District Office of the Division.

(14) Injection into the wells shown on Exhibit "A" should be conducted at a maximum surface injection pressure of 1121 psi; provided however that the Division may administratively grant a surface injection pressure increase upon a showing by Apache that such increase will not result in the fracturing of the injection interval or confining strata.

(15) The applicant further seeks to qualify the waterflood project as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(16) The evidence presented demonstrates that:

(a) the application for approval of the proposed secondary recovery project has not been prematurely filed either for economic or technical reasons;

(b) the area affected by the proposed project has been so depleted by primary operations that it is prudent to apply secondary recovery techniques to maximize the ultimate recovery of crude oil from the pool; and

(c) the proposed secondary recovery project meets all the criteria for certification by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (NMSA 1978 Sections 7-29A-1 through 7-29A-5).

(17) The approved project area should comprise the entire East Blinebry-Drinkard Unit Area; provided however that the "project area" and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

IT IS THEREFORE ORDERED THAT:

(1) Apache Corporation is hereby authorized to institute a waterflood project within its East Blinebry-Drinkard Unit Area, described in Finding No. (3) above, by the injection of water into the Blinebry and Drinkard formations, Drinkard and Blinebry Oil & Gas Pools, through seventeen (17) injection wells shown on Exhibit "A" attached to this order located in Sections 1, 11, 12, 13 and 14, Township 21 South, Range 37 East, NMPM, Lea County, New Mexico.

(2) Injection into the Unitized Interval, described in Finding No. (5) above, shall be limited to the oil-bearing portions of the Blinebry and Drinkard formations. The applicant shall, insofar as is practical, avoid injection into any gas-bearing zones within any or all of the three formations within the Unitized Interval, and shall otherwise take steps as may be necessary to protect these gas-bearing intervals.

(3) The operator shall 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.

(4) Injection into each of the wells shown on Exhibit "A" shall be accomplished through 2 3/8 inch internally plastic-lined tubing installed in a packer located within 100 feet of the uppermost injection perforations or open hole interval. The casing-tubing annulus in each well shall be filled with an inert fluid and a gauge or approved leak-detection device shall be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(5) The injection wells or pressurization system shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 1121 psi.

(6) The Division Director may administratively authorize a pressure limitation in excess of the above upon a showing by the operator that such higher pressure will not result in the fracturing of the injection formation or confining strata.

(7) Prior to commencing injection operations into the Elliot Monterey Well No. 5 (API No. 30-025-06334), the Lockhart B-11 Well No. 4 (API No. 30-025-06476), the Lockhart B-11 Well No. 6 (API No. 30-025-06527), the Lockhart B-11 Well No. 17 (API No. 30-025-06536) and the Lockhart B-12 Well No. 4 (API No. 30-025-06539), the deeper perforations below the Unitized Interval in each of these wells shall be squeeze cemented or otherwise isolated by a method approved by the Hobbs District Office of the Division.

(8) Prior to commencing injection operations, the casing in each well shall be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing.

(9) The operator shall give advance notice to the supervisor of the Division's Hobbs District Office of the date and time (i) injection equipment will be installed, (ii) the mechanical integrity pressure tests will be conducted on the injection wells, and (iii) remedial plug back work will be conducted on the wells described in Ordering Paragraph No. (7), so that these operations may be witnessed.

(10) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of the failure of the tubing, casing or packer in any of the injection wells or the leakage of water, oil or gas from or around any producing or plugged and abandoned well within the project area, and shall promptly take all steps necessary to correct such failure or leakage.

(11) The waterflood project is hereby designated the East Blinebry-Drinkard Unit Waterflood Project, and the applicant shall conduct injection operations in accordance with Division Rules No. 701 through 708, and shall submit monthly progress reports in accordance with Division Rules No. 706 and 1115.

(12) The injection authority granted herein for each well shown on Exhibit "A" shall terminate one year after the date of this order if the operator has not commenced injection operations into the wells; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(13) The East Blinebry-Drinkard Unit Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the area described in Finding Paragraph No. (3), provided however, the project area and/or the producing wells eligible for the enhanced oil recovery (EOR) tax rate may be contracted and reduced based upon the evidence presented by the applicant in its demonstration of a positive production response.

(14) To be eligible for the EOR tax rate, the operator shall advise the Division of the date and time water injection commences within the secondary recovery project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(15) At such time as a positive production response occurs, and within five years from the date the project was certified to the New Mexico Taxation and Revenue Department, the applicant must apply to the Division for certification of a positive production response. This application shall identify the area benefiting from enhanced oil recovery operations and the specific wells eligible for the EOR tax rate. The Division may review the application administratively or set it for hearing. Based upon the evidence presented, the Division will certify to the New Mexico Taxation and Revenue Department those wells that are eligible for the EOR tax rate.

(16) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

MARK E. FESMIRE, P.E.
Director

S E A L

Exhibit "A"
Case No. 13503
Division Order No. R-12394
East Blinebry-Drinkard Waterflood Project
Approved Injection Wells (All in Township 21 South, Range 37 East, NMPM)

PI Number	Well Location	Injection Interval	Packer Depth	Maximum Surface Injection Pressure
)25-06325	2970' FSL & 330' FWL (Unit M) Section 1	5,880'-5,971' OH	5,830'	1121 PSIG
)25-06334	660' FSL & 810' FWL (Unit U) Section 1	5,810'-5,987' Perf.	5,760'	1121 PSIG
)25-06476	330' FNL & 1650' FWL (Unit C) Section 11	5,943'-6,730' Perf.	5,893'	1121 PSIG
)25-06527	330' FNL & 330' FEL (Unit A) Section 11	6,595'-6,766' Perf.	6,445'	1121 PSIG
)25-06478	660' FSL & 1980' FEL (Unit O) Section 11	5,604'-6,650' Perf.	5,554'	1121PSIG
)25-06479	660' FNL & 330' FEL (Unit A) Section 11	5,759'-5,852' Perf.	5,709'	1121 PSIG
)25-06481	1980' FSL & 330' FEL (Unit I) Section 11	5,696'-6,703' Perf.	5,646'	1121 PSIG
)25-06529	1650' FNL & 1650' FEL (Unit G) Section 11	5,724'-5,894' Perf.	5,674'	1121 PSIG
)25-06536	1980' FNL & 1980' FEL (Unit G) Section 11	6,582'-6.708' Perf.	6,520'	1121 PSIG
)25-06535	2310' FNL & 330' FWL (Unit E) Section 11	6,453'-6,570' Perf.	6,403'	1121 PSIG
)25-06539	1650' FNL & 660' FWL (Unit E) Section 12	5,740'-6,747' Perf.	5,690'	1121 PSIG
)25-06541	330' FNL & 1980' FWL (Unit C) Section 12	5,796'-5,996' Perf.	5,746'	1121 PSIG
)25-06546	1980' FNL & 660' FWL (Unit E) Section 12	5,712'-5,908' Perf.	5,662'	1121 PSIG
)25-06556	1980' FNL & 660' FWL (Unit E) Section 13	5,680'-6,703' Perf.	5,630'	1121 PSIG
)25-06575	660' FNL & 330' FEL (Unit A) Section 14	5,741'-5,877' Perf.	5,691'	1121 PSIG
)25-06550	660' FSL & 660' FWL (Unit M) Section 12	5,720'-5,815' Perf.	5,670'	1121 PSIG
)25-06566	660' FNL & 1650' FWL (Unit C) Section 13	5,702'-5,888' Perf.	5,652'	1121 PSIG