# 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. 12666 ORDER NO. R-11638

# APPLICATION OF TEXLAND PETROLEUM-HOBBS, L.L.C. FOR APPROVAL OF A WATERFLOOD PROJECT FOR ITS HOBBS UPPER BLINEBRY POOL COOPERATIVE WATERFLOOD AREA AND QUALIFICATION OF SAID PROJECT FOR THE RECOVERED OIL TAX RATE PURSUANT TO THE ENHANCED OIL RECOVERY ACT, LEA COUNTY, NEW MEXICO.

#### **ORDER OF THE DIVISION**

#### **BY THE DIVISION:**

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This case came on for hearing at 8:15 a.m. on June 14, 2001, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this <u>20th</u> day of August, 2001, 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) The applicant, Texland Petroleum-Hobbs, L.L.C. ("Texland"), seeks authority to institute a waterflood project within its Hobbs Upper Blinebry Pool Cooperative Waterflood Area ("Project Area"), described as follows, by the injection of water into the Hobbs-Upper Blinebry Pool through fifteen initial injection wells, all as shown on Exhibit "A" attached to this order:

Township 18 South, Range 38 East, NMPM, Lea County, New Mexico

Section 28: SW/4 Section 29: SW/4, S/2 SE/4, NW/4 SE/4, SW/4 NW/4, S/2 NW/4 NW/4 Section 30: SE/4, S/2 NE/4 Section 31: NE/4 NE/4 Section 32: N/2, SW/4 Section 33: NW/4, N/2 NE/4, SE/4 NE/4, NE/4 SE/4

(3) The project area comprises 1,580 acres and encompasses twelve separate state, federal and fee leases, described as follows:

Lease Name	Lease Type	Lease Description
H. D. McKinley	Fee	Section 30: S/2 NE/4
Bowers "A"	Federal	Section 30: SE/4
		Section 29: W/2 SW/4, SW/4 NW/4,
		S/2 NW/4 NW/4
State "A-29"	State	Section 29: E/2 SW/4, NW/4 SE/4
State "I-29"	State	Section 29: S/2 SE/4
W. D. Grimes	Fee	Section 28: SW/4
W. D. Grimes NCT-B	Fee	Section 33: NE/4 SE/4, E/2 NE/4
		NW/4 NE/4
State "B"	State	Section 33: N/2 NW/4
State "G"	State	Section 33: S/2 NW/4
State "A"	State	Section 32: N/2 NE/4
Shell State "A"	State	Section 32: S/2 NE/4
W. D. Grimes NCT-A	Fee	Section 32: W/2
Fowler	Fee	Section 31: NE/4 NE/4

All in Township 18 South, Range 38 East, NMPM

(4) With the exception of the State "A" Lease, which is currently operated by Apache Corporation ("Apache"), and the Shell State "A" Lease, which is currently operated by Occidental Permian Limited Partnership ("Occidental"), all of the leases within the project area are currently operated by the applicant.

- (5) The applicant testified that:
  - (a) 100% of the working interest in the State "A-29", State "I-29", W. D. Grimes, W. D. Grimes NCT-B, State "B", State "G", W. D. Grimes NCT-A, H. D. McKinley, Bowers "A" and Fowler Leases is owned by Texland;
  - (b) 100% of the working interest in the State "A" Lease is owned by Apache, and 100% of the working

interest in the Shell State "A" Lease is owned by Occidental; and

(c) there are over 300 royalty and overriding royalty interest owners in various leases within the proposed project area.

(6) The proposed project area contains a 20-acre tract that comprises the S/2 NW/4 NW/4 of Section 29. The applicant's evidence shows that there is a plugged and abandoned well on this tract. The applicant's proposed operations do not include utilizing this plugged and abandoned well as either a producing or injection well within the proposed waterflood project; therefore, this 20-acre tract should be excluded from the proposed project area.

(7) The proposed project area encompasses a portion of the Hobbs Upper-Blinebry Pool.

- (8) Within the project area, the applicant proposes to:
  - a) drill fifteen new injection wells in order to establish a 40-acre five-spot injection pattern;
  - b) initially utilize eight (8) producing wells located in Sections 29, 30, 32 and 33, and probably drill additional producing wells subsequent to achieving waterflood response;
  - c) pursuant to an agreement with Apache and Occidental, operate the State "A" Well No. 9, a leaseline injection well that will be located on Apache's State "A" Lease at a location 215 feet from the North line and 150 feet from the East line (Unit A) of Section 32;
  - d) pursuant to an agreement with Apache and Occidental, operate the State "A" Well No. 8, a leaseline injection well that will be located on Apache's State "A" Lease at a location 1250 feet from the North and East lines (Unit A) of Section 32; and

e) maintain separate production facilities to allow for the separate measurement and storage of production from each of the producing leases within the project area.

(9) The applicant further testified that all production and revenue from the project area will be separately maintained and paid on a lease basis.

(10) The wells within the project area are in an advanced state of depletion. Average production from the eight (8) existing producing wells is approximately 20 barrels of oil per day.

(11) The geologic evidence demonstrates that the Upper-Blinebry formation is continuous and correlatable across the project area.

(12) Texland estimates that initial capital costs to implement waterflood operations are approximately \$5.8 million dollars. Applicant further testified that drilling additional producing wells within the project area will add an additional \$4.0 million dollars to the project cost.

(13) Texland estimates that implementing waterflood operations within the project area should result in the recovery of an additional 4.8 million barrels of oil that would otherwise not be recovered, thereby preventing waste.

(14) Approval of the proposed cooperative waterflood project should result in the recovery of additional hydrocarbons from the Upper Blinebry formation within the project area that may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.

(15) There are three (3) wells within the "area of review," described as follows, that are not constructed adequately to preclude injected fluid from the Upper Blinebry formation from migrating into and having possible detrimental effects on the Hobbs-Drinkard Pool:

Operator & Well Name	API Number	Well Location
Occidental Hobbs Gb/SA Unit No. 412	30-025-23384	Unit A, Section 30, T-18S, R38E
Occidental Hobbs Gb/SA Unit No. 112	30-025-23207	Unit D, Section 33, T-18S, R-38E

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Texaco Exploration & Production Inc. H. D. McKinley No. 9

30-025-23221

Unit G, Section 30, T-18S, R-38E

(16) The Hobbs Gb/SA Unit Wells No. 412 and 112 are currently completed as producing wells within the Hobbs Grayburg-San Andres Pool. Both of these wells are perforated in the Hobbs-Upper Blinebry and Hobbs-Drinkard Pools, and both lack a cast iron bridge plug (CIBP) or other mechanical device that would provide separation between these two pools. The H. D. McKinley Well No. 9 is an inactive producing well in the Hobbs-Upper Blinebry and Hobbs-Drinkard Pools. This well currently has a CIBP set above the Hobbs-Upper Blinebry Pool, but is not equipped with a CIBP or other mechanical device that would provide separation between the Hobbs-Upper Blinebry Pool, but is not equipped with a CIBP or other mechanical device that would provide separation between the Hobbs-Upper Blinebry and Hobbs-Drinkard Pools in the wellbore.

(17) Prior to commencing injection operations into any proposed injection well located within one-half mile of the Hobbs Gb/SA Unit Wells No. 412 and 112, or the H. D. McKinley Well No. 9, Texland should be required to consult with the Hobbs District Office of the Division, Occidental and Texaco Exploration and Production Inc., to devise and execute a plan whereby remedial work will be conducted on these wellbores in order to effectively isolate the Hobbs-Upper Blinebry Pool from the Hobbs-Drinkard Pool.

(18) 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.

(19) Injection should be accomplished through 2 3/8-inch internally plasticlined tubing installed in a packer set within 100 feet of the uppermost injection perforation in each well. The casing-tubing annulus should be filled with an inert fluid and a gauge or approved leak-detection device should be attached to the annulus in order to determine leakage in the casing, tubing, or packer.

(20) The injection wells or pressurization system should be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than 1140 psi.

(21) Prior to commencing injection operations, the casing in each well should be pressure tested throughout the interval from the surface down to the proposed packer setting depth to assure the integrity of such casing. (22) The operator should 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 proposed injection wells, and (iii) remedial work will be conducted on the Hobbs Gb/SA Unit Wells No. 112 and 412 and the H. D. McKinley Well No. 9, so these operations may be witnessed.

(23) The operator should 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 should take all steps as may be timely and necessary to correct such failure or leakage.

(24) The proposed cooperative waterflood project should be approved and the project should be governed by Division Rules No. 701 through 708.

(25) The applicant seeks to qualify the proposed 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).

(26) The evidence presented demonstrates that the proposed waterflood project meets all the criteria for approval.

(27) The approved project area should initially comprise the entire Hobbs Upper Blinebry Cooperative Waterflood Area; 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.

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

(29) 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.

(30) The injection authority granted herein for the wells shown on Exhibit "A" should 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.

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### **IT IS THEREFORE ORDERED THAT:**

(1) Texland Petroleum-Hobbs L.L.C. is hereby authorized to institute a cooperative waterflood project within its Hobbs Upper Blinebry Pool Cooperative Waterflood Area, described as follows, by the injection of water into the Hobbs-Upper Blinebry Pool through fifteen initial injection wells, all as shown on Exhibit "A":

#### Township 18 South, Range 38 East, NMPM, Lea County, New Mexico

Section 28: SW/4 Section 29: SW/4, S/2 SE/4, NW/4 SE/4, SW/4 NW/4, Section 30: SE/4, S/2 NE/4 Section 31: NE/4 NE/4 Section 32: N/2, SW/4 Section 33: NW/4, N/2 NE/4, SE/4 NE/4, NE/4 SE/4

(2) The applicant's request to include a 20-acre tract comprising the S/2 NW/4 NW/4 of Section 29, Township 18 South, Range 38 East, NMPM, within the proposed project area is hereby <u>denied</u>.

(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 shall be accomplished through 2 3/8-inch internally plastic-lined tubing installed in a packer set within 100 feet of the uppermost injection perforation in each well. The casing-tubing annulus 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 1140 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, 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.

(8) Prior to commencing injection operations into any proposed injection well located within one-half mile of the Hobbs Gb/SA Unit Wells No. 412 and 112, or the H. D. McKinley Well No. 9, as described in Finding No. (15), the applicant shall consult with the Hobbs District Office of the Division, Occidental and Texaco Exploration and Production Inc., to devise and execute a plan whereby remedial work will be conducted on these wellbores in order to effectively isolate the Hobbs-Upper Blinebry Pool from the Hobbs-Drinkard Pool.

(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 proposed injection wells, and (iii) remedial work will be conducted on the Hobbs Gb/SA Unit Wells No. 112 and 412 and the H. D. McKinley Well No. 9, so 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 take all steps as may be timely and necessary to correct such failure or leakage.

(11) The waterflood project is hereby designated the Hobbs Upper Blinebry Cooperative 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 Hobbs Upper Blinebry Cooperative Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the entire Hobbs Upper Blinebry Cooperative Waterflood Area; 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.

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

(14) 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.

(15) 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 well; provided, however, the Division, upon written request by the operator, may grant an extension for good cause.

(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.



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STATE OF NEW MEXICO OIL CONSERVATION DIVISION

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LORI WROTENBERY Director

# Exhibit "A" Division Order No. R-11638 Hobbs Upper Blinebry Cooperative Waterlflood Project <u>Approved Injection Wells</u>

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Well Name & Number	API Number	Well Location	Injection Interval	Packer Depth
State "A" No. 9	N/A	215' FNL & 150' FEL, Unit A, Section 32, T-18S, R-38E	5700'-6100'	5,600'
Bowers "A" Federal No. 41	N/A	1310' FSL & 1400' FEL, Unit O, Section 30, T-18S, R-38E	5,700'-6,100'	5,600'
State "A-29" No. 10	N/A	110' FSL & 1490' FWL, Unit N, Section 29, T-18S, R-38E	5,700'-6,100'	5,600'
State "A" No. 8	N/A	1250' FNL & 1250' FEL, Unit A, Section 32, T-18S, R-38E	5,700'-6,100'	5,600'
State "1-29" No. 9	N/A	1080' FSL & 1300' FEL, Unit P, Section 29, T-18S, R-38E	<b>5,700'-</b> 6,100'	5,600'
W. D. Grimes NCT-A No. 22	N/A	1300' FNL & 2560' FWL, Unit C, Section 32, T-18S, R-38E	5,700'-6,100'	5,600'
W. D. Grimes NCT-A No. 24	N/A	150' FNL & 290' FWL, Unit D, Section 32, T-18S, R-38E	5,700'-5,100'	5,600'
Bowers "A" Federal No. 40	N/A	2440' FNL & 195' FWL, Unit E, Section 29, T-18S, R-38E	5,700'-6,100'	5,600'
W. D. Grimes NCT-A No 25	N/A	140' FNL & 2550' FWL, Unit C, Section 32, T-18S, R-38E	5,700'-6,100'	5,600'
State "I-29" No. 7	N/A	140' FSL & 1200' FEL, Unit P, Section 29, T-18S, R-38E	5,700'-6,100'	5,600`
W. D. Grimes NCT-A No. 21	N/A	1090' FNL & 1370' FWL, Unit C, Section 32, T-18S, R-38E	5,700'-6,100'	5,600'
W. D. Grimes NCT-A No. 23	N/A	2370' FNL & 2325' FWL, Unit F, Section 32, T-18S, R-38E	5,700'-6,100'	5,600'
Bowers "A" Federal No. 42	N/A	1290' FSL & 170' FWL, Unit M, Section 29, T-18S, R-38E	5,700'-6,100'	5,600'
Bowers "A" Federal No. 43	N/A	1378' FSL & 1155' FWL, Unit L, Section 29, T-18S, R-38E	5,700'-6,100'	5,600'
Bowers "A" Federal No. 39	N/A	2505' FSL & 1415' FEL, Unit J, Section 30, T-18S, R-38E	5,700'-6,100'	5,600'