

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

October 15, 1996

Department of Taxation and Revenue P.O. Box 630 Santa Fe, NM 87509-0630

Attention: John Chavez, Secretary

RE: Certification of EOR Project Penroc Oil Corporation State Harris-AD-II-23 Leasehold Waterflood Project

Dear Secretary Chavez:

Enclosed is a copy of the certification issued to Penroc Oil Corporation for its State Harris-AD-11-23 Leasehold Waterflood EOR project, certified by this Division on September 1, 1996, to be a qualified Enhanced Oil Recovery Project. If the operator applies for certification of positive production response within five years from that date, this project will be eligible for the *Recovered Oil Tax Rate* as provided in Laws of 1992, Chapter 38.

Only oil production from that portion of the lands identified in the certification which is actually developed for enhanced recovery will be eligible for the reduced tax rate. At the time positive production response is certified, we will identify for you the specific lands and wells within the project which qualify for the *Recovered Oil Tax Rate*.

Sincerely, William J. L llav Director WJL/BES

Enclosures



# NEW MEXICO ENERGY, MINÉRALS & NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION 2040 South Pacheco Street Santa Fe, New Mexico 87505 (505) 827-7131

October 15, 1996

Penroc Oil Corporation P.O. Box 5970 Hobbs, New Mexico 88241-5970

Attention: Mr. M.Y. Merch Merchant

# CERTIFICATION OF ENHANCED OIL RECOVERY PROJECT FOR RECOVERED OIL TAX RATE

The New Mexico Oil Conservation Division hereby certifies that the following Enhanced Oil Recovery Project has been approved by the Division as a secondary project, pursuant to the provisions of the *New Mexico Enhanced Oil Recovery Act* (Laws of 1992, Chapter 38). In order to qualify for the *Recovered Oil Tax Rate*, you must apply for certification of positive production response within five years from the date of this certification. Only production from that portion of the project area identified herein which is actually developed for enhanced recovery will qualify for the reduced tax rate.

If operation of this project is terminated for any reason, the operator of the project must notify this Division and the Secretary of the Taxation and Revenue Department not later than the thirtieth day after termination.

NAME OF PROJECT:	State Harris-AD-II-23 Cooperative Leasehold Waterflood Project
OCD ORDER NO.	R-10639
OPERATOR:	Penroc Oil Corporation Attn: Mr. M.Y. Merch Merchant
ADDRESS:	P.O. Box 5970 Hobbs, New Mexico 88241-5970
CERTIFICATION DATE:	September 1, 1996

### PROJECT AREA

### TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM

Section 22: SE/4 NE/4 and SE/4 Section 23: SW/4 NW/4, SW/4 and W/2 SE/4

#### PROJECT PRODUCING WELLS ELIGIBLE FOR CREDIT

#### State 'AD' Wells

1)	Well No.3 (API No.30-025-20625)
	1980 FNL & 330 FEL, Unit Letter 'H', Section 22
2)	Well No.6 (API No.30-025-00025)
	330 FSL & 990 FEL, Unit Letter 'P', Section 22
3)	Well No.7 (API No.30-025-21146)
	660 FSL & 1830 FEL, Unit Letter 'O', Section 22

#### Harris State Wells

4)	Well No.2 (API No.30-025-21032)
	990 FSL & 1650 FWL, Unit Letter 'N', Section 23
5)	Well No.3 (API No.30-025-23643)

2260 FSL & 2310 FEL, Unit Letter 'J', Section 23

#### II-23 Wells

- 6) Well No.2 (API No.30-025-20657) 1980 FNL & 660 FWL, Unit Letter 'E', Section 23
  7) Well No.3 (API No.30-025-20658) 1980 FSL & 660 FWL, Unit Letter 'L', Section 23
- 8) Well No.5 (API No.30-025-20660) 660 FSL & 660 FWL, Unit Letter 'M', Section 23

#### PROJECT INJECTION WELLS

- 1) State 'AD' Well No.2 (API No.30-025-00024) 1980' FSL & 660' FEL, Unit 'I', Section 22
- Harris State Well No.4 (API No.30-025-21394)
   990' FSL & 2310' FEL, Unit 'O', Section 23

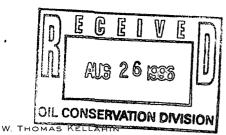
**APPROVED BY:** 

STATE OF NEW MEXICO OIL CONSERVATION DIVISION WILLIAM JEEMAY DIRECTOR/

. . .

SEAL

GOR NI



KELLAHIN AND KELLAHIN

ATTORNEYS AT LAW EL PATIO BUILDING II7 NORTH GUADALUPE POST OFFICE BOX 2265 SANTA FE, NEW MEXICO 87504-2265

Telephone (505) 982-4285 Telefax (505) 982-2047

NEW MEXICO BOARD OF LEGAL SPECIALIZATION RECOGNIZED SPECIALIST IN THE AREA OF NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

August 22, 1996

# HAND DELIVERED

Mr. Ben Stone Oil Conservation Division 2040 South Pacheco Santa Fe, New Mexico 87505

# Re: NMOCD Case 11543 (Order R-10639)

Request for Certification of Qualification for an Enhanced Oil Recovery Project for Penroc Oil Corporation

Dear Mr. Stone:

On behalf of Penroc Oil Corporation and in accordance with Division Order R-10639 (copy enclosed), I hereby request from the Division a Certificate of Qualification for the following described project:

Project Name:

State Harris-AD-II-23 Cooperative Leasehold Waterflood Project

Project Operator:

Penroc Oil Corporation P. O. Box 5970 Hobbs, New Mexico 88241-5970

## Project Area:

The designated and undesignated Mescalero-San Andres Pool within the following project area in Lea County, New Mexico, containing 480 acres, more or less and described as follows: Oil Conservation Division August 22, 1996 Page 2.

Township 10 South, Range 32 East, NMPM

Section 22: SE/4NE/4 and SE/4 Section 23: SW/4NW/4, SW/4 and W/2SE/4

\*please note: Order R-10639 incorrectly described Section 23 as the "W/2NE/4" instead of the W/2SE/4. I have requested a Nunc Pro Tunc Order.

#### Project wells eligible for credit:

- 1. State "AD" Well No. 6 (API No. 30-025-20625) 1980 feet FNL & 330 feet FEL (Unit H) Section 22
- 2. State "AD" Well No. 3 (API No. 30-025-00025) 330 feet FSL & 990 feet FEL (Unit P) Section 22
- 3. State "AD" Well No. 7 (API No. 30-025-21146) 660 feet FSL & 1830 feet FEL (Unit O) Section 22
- 4. Harris State Well No. 2 (API No. 30-025-1032) 990 feet FSL & 1650 feet FWL (Unit N) Section 23
- 5. Harris State Well No. 3 (API No. 30-025-23643) 2260 feet FSL & 2310 feet FEL (Unit J) Section 23
- 6. II-23 Well No. 2 (API No. 30-025-20657) 1980 feet FNL & 660 feet FWL (Unit E) Section 23
- 7. II-23 Well No. 3 (API No. 30-025-20658) 1980 feet FSL & 660 feet FWL (Unit L) Section 23
- 8. II-23 Well No. 5 (API No. 30-025-20660) 660 feet FSL & 660 feet FWL (Unit M) Section 23

Oil Conservation Division August 22, 1996 Page 3.

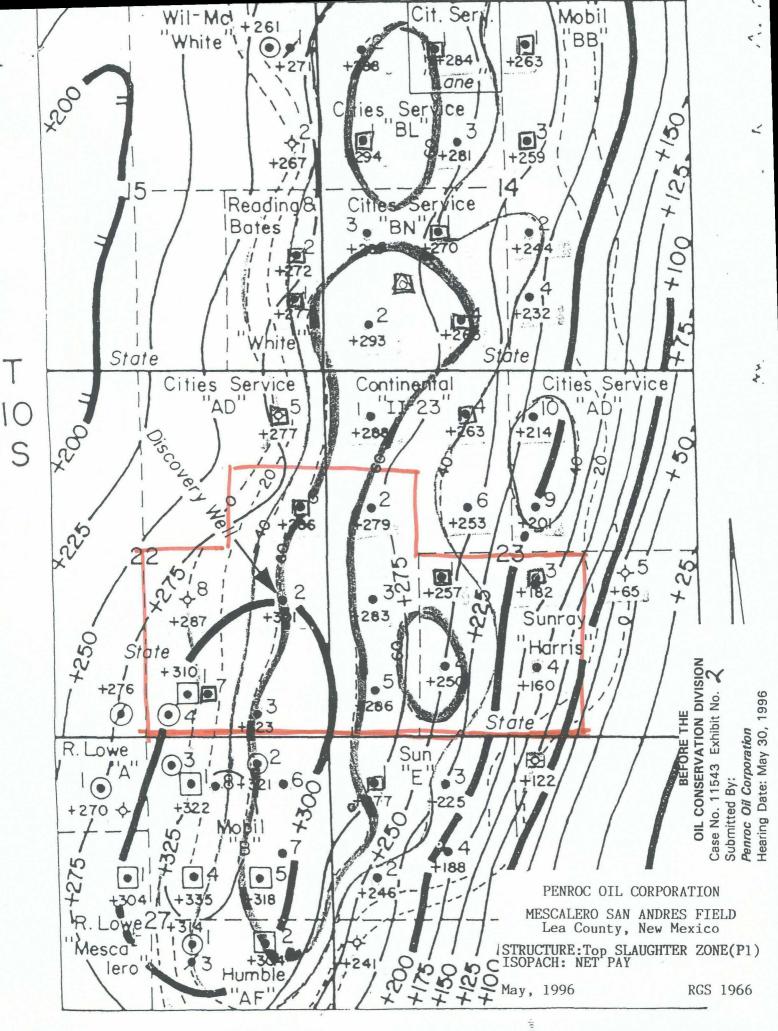
Project injection wells:

- 1. State "AD"" Well No. 2 (API No. 30-025-00024) 1980 feet FSL & 660 feet FEL (Unit I) Section 22
- 2. Harris State Well No. 4 (API No. 30-025-21394) 990 feet FSL & 2310 feet FEL (Unit O) Section 23

Please let me know if you require anything further.

truly W. Thomas Kellahin

cc: Penroc Oil Corporation Attn: M. Y. Merch Merchant



# 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. 11543 ORDER NO. R-10639

# APPLICATION OF PENROC OIL CORPORATION FOR A COOPERATIVE LEASEHOLD WATERFLOOD PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT PURSUANT TO THE "NEW MEXICO OIL RECOVERY ACT", LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

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

This cause came on for hearing at 8:15 a.m. on May 30, 1996 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>12th</u> day of August, 1996 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant in this matter, Penroc Oil Corporation ("Penroc"), as the current operator of three certain State of New Mexico oil and gas leases in Sections 22 and 23, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico: (a) the Harris State lease which, according to Division records, comprises the E/2 SW/4 and SE/4 of said Section 23; (b) the State "AD" lease which, according to Division records, comprises the E/2 of said Section 22 and the NE/4 of said Section 23; and, (c) the State "II" lease which, according to Division records, comprises the NW/4 and W/2 SW/4 of said Section 23, seeks authority to institute a cooperative leasehold waterflood project in the Mescalero-San Andres Pool within a portion of the three aforementioned leases comprising the following described 480 acres, more or less:

Case No.	11543
Order No	. R-10639
Page 2	

۰.

### TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM

Section 22: SE/4 NE/4 and SE/4 Section 23: SW/4 NW/4, SW/4, and W/2 NE/

(3) Penroc proposes to convert the following two wells located within the proposed project area into water injection wells and utilize the existing Mescalero-San Andres interval perforations in both wells:

(a) the State "AD" Well No. 2 (API No. 30-025-00024), located at a standard oil well location 3300 feet from the North line (1980 feet from the South line) and 660 feet from the East line (Unit i) of said Section 22, is a currently producing oil well with perforations from approximately 4,063 feet to 4,200 feet; and,

(b) the Harris State Well No. 4 (API No. 30-025-21394), located at a standard oil well location 990 feet from the South line and 2310 feet from the East line (Unit O) of said Section 23, is temporarily abandoned with perforations from approximately 4,176 feet to 4,260 feet.

(4) The applicant testified that cumulative primary oil recovery from the area encompassing the proposed project area has been in excess of 800,000 barrels.

(5) The Mescalero-San Andres oil production from the proposed project area can be considered to be in an advanced state of depletion and should therefore be properly classified as "stripper production".

(6) Based upon a geologic analysis of the project area and by analogy to its State "BN" Waterflood Project comprising the SW/4 of Section 14, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico (approved by Division Order No. R-9353), Penroc testified that approximately 411,000 barrels of additional incremental oil production is expected to be recovered from the proposed project area by spending an estimated \$80,000.00 to convert the two wells and continuing to produce from the 8 currently producing wells.

(7) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil thereby preventing waste, exhibits sound engineering practices, is in the best interest of conservation, and will not impair correlative rights.

(8) The applicant submitted data on the proposed conversion of the two subject injection wells, water wells in the area, and all other wells (including plugged wells) which penetrate the zone of interest within the 1/2-mile "area-of-review" of the two subject injection wells. This data shows that wells in the area are cased and plugged so as to protect fresh water and prevent fluid migration from the injection zone, and includes testimony indicating no evidence of open faults or any other hydrologic connection between the injection zone and the fresh water resources in the area.

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

(10) Injection into each of the two wells should be accomplished through 2 3/8inch internally plastic-lined tubing installed in a packer set no higher than 100 feet above the top of the upper most perforation; the casing-tubing annulus in each well should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(11) The injection wells or pressurization system for each well should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure at the wellhead to no more than 0.2 psi per foot of depth to the top most perforation.

(12) Prior to commencing injection operations, the casing in each of the subject wells should be pressure tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(13) The operator should give advance notice to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(14) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

۰.

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area" should be designated the "*State Harris-AD-II-*23 Cooperative Leasehold Waterflood Project" and is to comprise the 480 acres, more or less, as described above in Finding Paragraph No. (2).

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

#### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Penroc Oil Corporation ("Penroc"), is hereby authorized to institute a waterflood project within portions of its Harris State, State "AD", and State "II" leases by converting the following two wells located in Township 10 South, Range 32 East, NMPM, Mescalero-San Andres Pool, Lea County, New Mexico into water injection wells and utilizing the existing perforated intervals in both wells:

(a) the State "AD" Well No. 2 (API No. 30-025-00024), located at a standard oil well location 3300 feet from the North line (1980 feet from the South line) and 660 feet from the East line (Unit I) of Section 22, is a currently producing oil well with perforations from approximately 4,063 feet to 4,200 feet; and, injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(9) Should it become necessary, the supervisor of the Hobbs District Office of the Division or the Director may at any time order a decrease of the injection pressure on any of the subject injection wells.

(10) The operator of the State Harris-AD-II-23 Cooperative Leasehold Waterflood Project shall conduct injection operations in accordance with all applicable Division rules, regulations, and policies, including Division General Rules 701 through 708 and shall submit monthly progress reports in accordance with Division General Rules 706 and 1115.

#### **IT IS FURTHER ORDERED THAT:**

(11) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(12) The approved "project area" shall be limited to that area described in Decretory Paragraph No. (2) above.

(13) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(14) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(15) The injection authority granted herein for the proposed injection wells shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(16) Jurisdiction of this cause is 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 ወስ WILLIAM J. LeMAY Director

SEAL

# 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. 11543 ORDER NO. R-10639

# APPLICATION OF PENROC OIL CORPORATION FOR A COOPERATIVE LEASEHOLD WATERFLOOD PROJECT AND QUALIFICATION FOR THE RECOVERED OIL TAX CREDIT PURSUANT TO THE "NEW MEXICO OIL RECOVERY ACT", LEA COUNTY, NEW MEXICO.

#### ORDER OF THE DIVISION

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

This cause came on for hearing at 8:15 a.m. on May 30, 1996 at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this <u>12th</u> day of August, 1996 the Division Director, having considered the testimony, the record and the recommendations of the Examiner, and being fully advised in the premises,

#### FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant in this matter, Penroc Oil Corporation ("Penroc"), as the current operator of three certain State of New Mexico oil and gas leases in Sections 22 and 23, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico: (a) the Harris State lease which, according to Division records, comprises the E/2 SW/4 and SE/4 of said Section 23; (b) the State "AD" lease which, according to Division records, comprises the E/2 of said Section 22 and the NE/4 of said Section 23; and, (c) the State "II" lease which, according to Division records, comprises the NW/4 and W/2 SW/4 of said Section 23, seeks authority to institute a cooperative leasehold waterflood project in the Mescalero-San Andres Pool within a portion of the three aforementioned leases comprising the following described 480 acres, more or less:

#### TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM

Section 22: SE/4 NE/4 and SE/4 Section 23: SW/4 NW/4, SW/4, and W/2 NE/4.

(3) Penroc proposes to convert the following two wells located within the proposed project area into water injection wells and utilize the existing Mescalero-San Andres interval perforations in both wells:

(a) the State "AD" Well No. 2 (API No. 30-025-00024), located at a standard oil well location 3300 feet from the North line (1980 feet from the South line) and 660 feet from the East line (Unit I) of said Section 22, is a currently producing oil well with perforations from approximately 4,063 feet to 4,200 feet; and,

(b) the Harris State Well No. 4 (API No. 30-025-21394), located at a standard oil well location 990 feet from the South line and 2310 feet from the East line (Unit O) of said Section 23, is temporarily abandoned with perforations from approximately 4,176 feet to 4,260 feet.

(4) The applicant testified that cumulative primary oil recovery from the area encompassing the proposed project area has been in excess of 800,000 barrels.

(5) The Mescalero-San Andres oil production from the proposed project area can be considered to be in an advanced state of depletion and should therefore be properly classified as "stripper production".

(6) Based upon a geologic analysis of the project area and by analogy to its State "BN" Waterflood Project comprising the SW/4 of Section 14, Township 10 South, Range 32 East, NMPM, Lea County, New Mexico (approved by Division Order No. R-9353), Penroc testified that approximately 411,000 barrels of additional incremental oil production is expected to be recovered from the proposed project area by spending an estimated \$80,000.00 to convert the two wells and continuing to produce from the 8 currently producing wells.

(7) The proposed waterflood project should result in the recovery of otherwise unrecoverable oil thereby preventing waste, exhibits sound engineering practices, is in the best interest of conservation, and will not impair correlative rights.

(8) The applicant submitted data on the proposed conversion of the two subject injection wells, water wells in the area, and all other wells (including plugged wells) which penetrate the zone of interest within the 1/2-mile "area-of-review" of the two subject injection wells. This data shows that wells in the area are cased and plugged so as to protect fresh water and prevent fluid migration from the injection zone, and includes testimony indicating no evidence of open faults or any other hydrologic connection between the injection zone and the fresh water resources in the area.

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

(10) Injection into each of the two wells should be accomplished through 2 3/8inch internally plastic-lined tubing installed in a packer set no higher than 100 feet above the top of the upper most perforation; the casing-tubing annulus in each well should be filled with an inert fluid; and a pressure gauge or approved leak-detection device should be attached to the annulus in order to determine leaks in the casing, tubing or packer.

(11) The injection wells or pressurization system for each well should be initially equipped with a pressure control device or acceptable substitute which will limit the surface injection pressure at the wellhead to no more than 0.2 psi per foot of depth to the top most perforation.

(12) Prior to commencing injection operations, the casing in each of the subject wells should be pressure tested throughout the interval, from the surface down to the proposed packer-setting depth, to assure integrity of such casing.

(13) The operator should give advance notice to the supervisor of the Hobbs District Office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity pressure-test in order that the same may be witnessed.

(14) The subject application should be approved and the project should be governed by the provisions of Rules 701 through 708 of the Division Rules and Regulations.

(15) The applicant further requests that the subject waterflood project be approved by the Division as a qualified "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(16) The evidence presented indicates that the subject waterflood project meets all the criteria for approval.

(17) The approved "project area" should be designated the "*State Harris-AD-II-*23 Cooperative Leasehold Waterflood Project" and is to comprise the 480 acres, more or less, as described above in Finding Paragraph No. (2).

(18) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(19) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(20) The injection authority granted herein for the proposed injection wells should terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

#### IT IS THEREFORE ORDERED THAT:

(1) The applicant, Penroc Oil Corporation ("Penroc"), is hereby authorized to institute a waterflood project within portions of its Harris State, State "AD", and State "II" leases by converting the following two wells located in Township 10 South, Range 32 East, NMPM, Mescalero-San Andres Pool, Lea County, New Mexico into water injection wells and utilizing the existing perforated intervals in both wells:

(a) the State "AD" Well No. 2 (API No. 30-025-00024), located at a standard oil well location 3300 feet from the North line (1980 feet from the South line) and 660 feet from the East line (Unit I) of Section 22, is a currently producing oil well with perforations from approximately 4,063 feet to 4,200 feet; and, (b) the Harris State Well No. 4 (API No. 30-025-21394), located at a standard oil well location 990 feet from the South line and 2310 feet from the East line (Unit O) of Section 23, is temporarily abandoned with perforations from approximately 4,176 feet to 4,260 feet.

(2) The waterflood project in the Mescalero-San Andres Pool is hereby designated the "*State Harris-AD-II-23 Cooperative Leasehold Waterflood Project*" and shall comprise the following described 480 acres, more or less, in Lea County, New Mexico:

# TOWNSHIP 10 SOUTH, RANGE 32 EAST, NMPM Section 22: SE/4 NE/4 and SE/4 Section 23: SW/4 NW/4, SW/4, and W/2 NE/4.

(3) Penroc, as operator, shall take all steps necessary to ensure that the injected water only enters and remains confined to 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 approximately within 100 feet of the uppermost injection perforation; the casing-tubing annulus in each well shall be filled with an inert fluid and equipped with an approved pressure gauge or attention-attracting leak detection device.

(5) The Division Director shall have the authority to administratively authorize an increase in the injection pressure limitation placed upon any well upon a proper showing by the operator that such higher pressure will not result in the migration of the injected water from its respective interval or fracture the confining strata.

(6) Each injection well or respective pressurization system shall be equipped with a pressure-limiting switch or other acceptable device which will limit the wellhead pressure on the injection well to no more than 810 psi. for the State "AD" Well No. 2 and 835 psi. for the Harris State Well No. 4.

(7) Prior to commencing injection operations, the casing in each injection 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) The applicant shall immediately notify the supervisor of the Hobbs District Office of the Division of the failure of the tubing, casing or packer in either one of the injection wells, the leakage of water or oil from or around any producing well, or the leakage of water or oil from any plugged and abandoned well within the project area, and shall take such steps as may be timely and necessary to correct such failure or leakage.

(9) Should it become necessary, the supervisor of the Hobbs District Office of the Division or the Director may at any time order a decrease of the injection pressure on any of the subject injection wells.

(10) The operator of the State Harris-AD-II-23 Cooperative Leasehold Waterflood Project shall conduct injection operations in accordance with all applicable Division rules, regulations, and policies, including Division General Rules 701 through 708 and shall submit monthly progress reports in accordance with Division General Rules 706 and 1115.

#### **IT IS FURTHER ORDERED THAT:**

(11) The subject waterflood project is hereby approved as an "Enhanced Oil Recovery Project" pursuant to the "Enhanced Oil Recovery Act" (Laws 1992, Chapter 38, Sections 1 through 5).

(12) The approved "project area" shall be limited to that area described in Decretory Paragraph No. (2) above.

(13) To be eligible for the EOR credit, prior to commencing injection operations, the operator must request from the Division a Certificate of Qualification, which certificate will specify the proposed project area as described above.

(14) At such time as a positive production response occurs and within five years from the date of the Certificate of Qualification, the applicant must apply to the Division for certification of positive production response, which application shall identify the area actually benefitting from enhanced recovery operations, and identifying the specific wells which the operator believes are eligible for the credit. The Division may review the application administratively or set it for hearing. Based upon evidence presented, the Division will certify to The Department of Taxation and Revenue those lands and wells which are eligible for the credit.

(15) The injection authority granted herein for the proposed injection wells shall terminate one year after the effective date of this order if the operator has not commenced injection operations into the subject wells, provided however, the Division, upon written request by the operator, may grant an extension thereof for good cause shown.

(16) Jurisdiction of this cause is 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 0 WILLIAM J. LeMAY Director

SEAL