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. 12964
ORDER NO. R-11929

APPLICATION OF SEELY OIL COMPANY FOR APPROVAL OF A WATERFLOOD PROJECT AND QUALIFICATION OF THE 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:

This case came on for hearing at 8:15 a.m. on January 9, 2003, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 16th day of April, 2003, 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. 12964 and 12983 were consolidated at the hearing for the purpose of testimony.

(3) The applicant, Seely Oil Company ("Seely"), seeks authority to institute a waterflood project within its proposed EK Penrose Sand Unit Area ("Project Area"), being the subject of companion Case No. 12983, by the injection of water into the Penrose Sand member of the Queen formation, EK Yates-Seven Rivers-Queen Pool, through nine initial injection wells, all as shown on Exhibit "A" attached to this order.

(4) The EK Penrose Sand Unit Area comprises the following-described acreage in Lea County, New Mexico:

Township 18 South, Range 33 East, NMPM

Section 24: SE/4
Section 25: NE/4

Township 18 South, Range 34 East, NMPM

Section 19: S/2
Section 20: W/2 SW/4, SE/4 SW/4
Section 29: NW/4, N/2 SW/4
Section 30: N/2, N/2 SE/4, E/2 SW/4

(5) The proposed project area encompasses a portion of the EK Yates-Seven Rivers-Queen Pool.

(6) Within the project area, the applicant proposes to utilize nine injection wells in a peripheral waterflood pattern. The applicant further proposes to initially utilize nine producing wells within the project. Among the nine proposed producing wells, five wells are current active producers, two wells will be re-entered or recompleted, and two wells will be drilled.

(7) The wells within the project area are in an advanced state of depletion.

(8) The applicant presented geologic evidence that demonstrates that:

(a) the Queen formation within the EK Yates-Seven Rivers-Queen Pool contains multiple pay intervals;

(b) the upper pay intervals within the Queen formation are generally being produced and waterflooded within the adjacent EK Queen Unit Area;

(c) the Penrose Sand member of the Queen formation is generally continuous throughout the project area; and,

(d) the productive limits of the Penrose Sand member of the Queen formation generally coincide with the boundaries of the EK Penrose Sand Unit Area.

(9) Seely estimates that initial capital costs to implement waterflood operations are approximately $1.8 million dollars. Total capital costs are estimated to be approximately $3.4 million dollars.

(10) Seely estimates that implementing waterflood operations within the project area should result in the recovery of an additional 460,000 barrels of oil that would otherwise not be recovered, thereby preventing waste.

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

(12) The following-described (3) wells within the "area of review" are not constructed adequately so as to preclude the movement of fluid from the proposed injection zone into other formations:

Operator & Well Name	API Number	Well Location
Yates Petroleum Corporation Howe "TG" Federal No. 2	30-025-29038	810' FSL & 1830' FWL, Unit N, Section 30, T-18S, R-34E
C. W. Trainer McElvain Federal No. 3	30-025-28557	766' FSL & 731' FWL, Unit M, Section 30, T-18S, R-34E
Concho Oil & Gas Corp. Edith Federal No. 2	30-025-29120	2130' FNL & 1980' FEL Unit G, Section 25, T-18S, R-33E

(13) The aforesaid Edith Federal Well No. 2 is located within the "area of review" of Seely's McElvain Federal Well No. 1, a proposed injection well located in Unit B of Section 25, Township 18 South, Range 33 East, NMPM.

(14) The aforesaid Howe "TG" Federal Well No. 2 and the McElvain Federal Well No. 3 are located within the "area of review" of Seely's Howe "TG" Federal Well No. 1, a proposed injection well located in Unit K of Section 30, Township 18 South, Range 34 East, NMPM.

(15) Prior to commencing injection operations into the McElvain Federal Well No. 1, the applicant should be required to perform remedial cement operations on the Edith Federal Well No. 2 in order to effectively isolate the Penrose Sand member of the Queen formation within this well.

(16) Prior to commencing injection operations into the Howe "TG" Federal Well No. 1, the applicant should be required to perform remedial cement operations on the Howe "TG" Federal Well No. 2 and the McElvain Federal Well No. 3 in order to effectively isolate the Penrose Sand member of the Queen formation within these wells.

(17) Prior to commencing injection operations into each of the following-described injection wells, the applicant should be required to perform the remedial operations specified in this paragraph with respect to such well in a manner approved by the supervisor of the Hobbs District Office of the Division:

EK Queen Unit No. 27:	Perforations from a depth of 4,370'-4,397' shall be cement squeezed.
EK Queen Unit No. 22:	Perforations from a depth of 4,432'-4,444' shall be cement squeezed.
EK Queen Unit No. 21:	Perforations from a depth of 4,390'-4,445' shall be cement squeezed. A 4 ½ inch liner shall be set from 4,350'-4,700' and cement circulated on this liner.
Citation No. 1:	Perforations from a depth of 4,573'-4,590' shall be cement squeezed.
Scharbauer No. 2:	Perforations from a depth of 4,474'-4,482' shall be cement squeezed.
Howe "TG" Federal No. 1:	Perforations from a depth of 9,519'-9,541' shall be cement squeezed. The cement top on the existing 5 ½ inch casing shall be raised from its existing depth of 5,800 feet to a depth of at least 500 feet above the proposed injection interval.
McElvain Federal No. 10	A cast iron bridge plug and cement on top shall be set at depths of 5,850 feet and 4,900 feet.

(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 plastic-lined 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 injections 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 926 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 proposed injection wells or any "area of review" wells so that 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 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 EK Penrose Sand Unit 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.

IT IS THEREFORE ORDERED THAT:

(1) Seely Oil Company is hereby authorized to institute a waterflood project within its EK Penrose Sand Unit Area, by the injection of water into the Penrose Sand member of the Queen formation, EK Yates-Seven Rivers-Queen Pool, through nine initial injection wells, all as shown on Exhibit "A" attached to this order. The EK Penrose Sand Unit Area is described as follows:

Township 18 South, Range 33 East, NMPM

Section 24: SE/4
Section 25: NE/4

Township 18 South, Range 34 East, NMPM

Section 19: S/2
Section 20: W/2 SW/4, SE/4 SW/4
Section 29: NW/4, N/2 SW/4
Section 30: N/2, N/2 SE/4, E/2 SW/4

(2) 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.

(3) 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.

(4) The injections 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 926 psi.

(5) 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.

(6) 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.

(7) Prior to commencing injection operations into the McElvain Federal Well No. 1, the applicant shall perform remedial cement operations on the Concho Oil & Gas Corporation Edith Federal Well No. 2 (API No. 30-025-29120) located 2130 feet from the North line and 1980 feet from the East line (Unit G) of Section 25, Township 18 South, Range 33 East, NMPM, in order to effectively isolate the Penrose Sand member of the Queen formation within this well.

(8) Prior to commencing injection operations into the Howe "TG" Federal Well No. 1, the applicant shall perform remedial cement operations on the Yates Petroleum Corporation Howe "TG" Federal Well No. 2 (API No. 30-025-29038) located 810 feet from the South line and 1830 feet from the West line (Unit N) of Section 30, Township 18 South, Range 34 East, NMPM, and the C. W. Trainer McElvain Federal

Well No. 3 (API No. 30-025-28557) located 766 feet from the South line and 731 feet from the West line (Unit M) of Section 30, Township 18 South, Range 34 East, NMPM, in order to effectively isolate the Penrose Sand member of the Queen formation within these wells.

(9) Subsequent to completing the remedial work on the aforesaid Edith Federal Well No. 2, the Howe "TG" Federal Well No. 2 and the McElvain Federal Well No. 3, the applicant shall provide documentation to the Santa Fe and Hobbs offices of the Division that such work has been successfully completed.

(10) Prior to commencing injection operations into each of the following-described injection wells, the applicant shall perform the remedial operations specified in this paragraph with respect to such well in a manner approved by the supervisor of the Hobbs District Office of the Division:

EK Queen Unit No. 27:	Perforations from a depth of 4,370'-4,397' shall be cement squeezed.
EK Queen Unit No. 22:	Perforations from a depth of 4,432'-4,444' shall be cement squeezed.
EK Queen Unit No. 21:	Perforations from a depth of 4,390'-4,445' shall be cement squeezed. A 4 ½ inch liner shall be set from 4,350'-4,700' and cement circulated on this liner.
Citation No. 1:	Perforations from a depth of 4,573'-4,590' shall be cement squeezed.
Scharbauer No. 2:	Perforations from a depth of 4,474'-4,482' shall be cement squeezed.
Howe "TG" Federal No. 1:	Perforations from a depth of 9,519'-9,541' shall be cement squeezed. The cement top on the existing 5 ½ inch casing shall be raised from its existing depth of 5,800 feet to a depth of at least 500 feet above the proposed injection interval.

McElvain Federal No. 10	A cast iron bridge plug and cement on top shall be set at depths of 5,850 feet and 4,900 feet.

(11) 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 proposed injection wells and "area of review" wells so these operations may be witnessed.

(12) 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.

(13) The waterflood project is hereby designated the EK Penrose Sand 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.

(14) The EK Penrose Sand Unit Waterflood Project is hereby certified as an "Enhanced Oil Recovery Project." The project area shall initially comprise the entire EK Penrose Sand Unit 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.

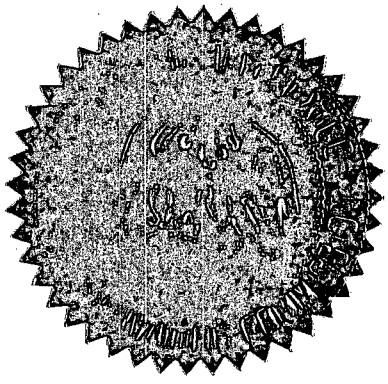
(15) To be eligible for the EOR tax rate, the operator shall advise the Division of the date and time water injection commences within the waterflood project. At that time, the Division will certify the project to the New Mexico Taxation and Revenue Department.

(16) 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.

(17) The injection authority granted herein for each of the wells 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.

(18) 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

Lori Wrotenbery

LORI WROTENBERY
Director

Exhibit "A"
Division Order No. R-11929
EK Penrose Sand Unit Waterflood Project
Approved Injection Wells

Well Name & Number	API Number	Well Location	Injection Interval	Packer Depth
EK Queen Unit No. 27	30-025-01636	990' FSL & 1980' FEL, Unit O, Section 24, T-18S, R-33E	4,628'-4,634'	4,575'
McElvain Federal No. 1	30-025-01646	660' FNL & 1980' FEL, Unit B, Section 25, T-18S, R-33E	4,637'-4,657'	4,575'
EK Queen Unit No. 22	30-025-02345	1980' FSL & 1897' FWL, Unit K, Section 19, T-18S, R-34E	4,678'-4,686'	4,600'
EK Queen Unit No. 21	30-025-02344	1980' FSL & 660' FWL, Lot 3, Section 19, T-18S, R-34E	4,698'-4,710'	4625'
Citation No. 1	30-025-34880	1650' FSL & 330' FWL, Unit L, Section 20, T-18S, R-34E	4,814'-4,822'	4,675'
Scharbauer No. 2	30-025-24939	330' FSL & 1650' FWL, Unit N, Section 20, T-18S, R-34E	4,746'-4,764'	4675'
Howe "TG" Federal No. 1	30-025-27759	1980' FSL & 1830' FWL, Unit K, Section 30, T-18S, R-34E	To Be Determined	4,675'
McElvain Federal No. 13	N/A	2275' FSL & 330' FEL, Unit I, Section 30, T-18S, R-34E	To Be Determined	TBD
McElvain Federal No. 10	30-025-35753	1650' FNL & 1980' FWL, Unit F, Section 29, T-18S, R-34E	4,778'-4,885'	4,700'