# 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. 12740 ORDER NO. R-9885-B** 

APPLICATION OF SEELY OIL COMPANY TO AMEND DIVISION ORDER NO. R-9885 BY EXTENDING THE VERTICAL LIMITS OF THE CENTRAL EK QUEEN UNIT, LEA COUNTY, NEW MEXICO.

## **ORDER OF THE DIVISION**

### BY THE DIVISION:

This case came on for hearing on October 18, 2001, at Santa Fe, New Mexico before Examiner Michael E. Stogner.

NOW, on this <u>19th</u> day of November, 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) By Order No. R-9885, issued in Case No. 10647 on April 27, 1993, the Division, upon application of Seely Oil Company ("Seely"), approved the Central EK Queen Unit comprising 988.40 acres, more or less, of State lands underlying the following described area in Lea County, New Mexico for the purpose of initiating and conducting secondary recovery operations:

## TOWNSHIP 18 SOUTH, RANGE 34 EAST, NMPM

Section 7: Lots 2, 3, and 4, SW/4 NE/4, SE/4 NW/4, E/2 SW/4, and SE/4

Section 8: SW/4 and S/2 SE/4

Section 9: W/2 SW/4
Section 17: N/2 N/2
Section 18: N/2 NE/4.

(3) Seely now seeks to amend: (i) Division Order No. R-9885; and (ii) the Central EK Queen Unit Agreement, by revising the definition of the "Unitized Formation" as

originally incorporated in the agreement and Ordering Paragraph No. (3) on page 3 of Order No. R-9885, which reads as follows:

"The vertical limits of said unit area or "Unitized Formation" is defined as that stratigraphic interval occurring between a point 100 feet above the top of the Queen Sand and 100 feet below the base of the Queen Sand. Said Queen interval occurs between 4366 feet and 4426 feet in the General Operating Company Santa Fe State Well No. 2 located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 18, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico as recorded on the Welex compensated density dual spaced neutron log on said well dated January 20, 1986."

- (4) The applicant now proposes that the "Unitized Formation" be defined as that stratigraphic interval occurring between a point from the top of the Yates sand at approximately 3,240 feet to the base of the Queen formation at 4,770 feet in the General American Operating Company Santa Fe State Well No. 2, now known as Seely's EK Queen Unit Well No. 2 (API No. 30-025-29570), located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 18, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico as recorded on the Welex Compensated Density Dual Spaced Neutron Log dated January 20, 1986.
- (5) The applicant presented evidence that indicates the discovery of other untapped oil producing horizons within the EK-Yates-Seven River-Queen Pool that were not included within the vertical limits of the unit agreement.
- (6) By Order No. R-606, issued in Case No. 842 on February 16, 1955, the Division created and defined the EK-Queen Pool for production from the Queen formation. This pool initially comprised the SE/4 of Section 13 and the NE/4 of Section 14, both in Township 18 South, Range 33 East, NMPM, Lea County, New Mexico. By Order No. R-2620, issued in Case No. 2957 on December 23, 1963, the Division extended the vertical limits of the EK-Queen Pool to include the Yates and Seven Rivers formations and redesignated the pool the EK-Yates-Seven Rivers-Queen Pool. This pool currently comprises all or portions of Section 36, Township 17 South, Range 33 East, NMPM, Sections 1, 12, 13, 14, 23, 24, and 25, Township 18 South, Range 33 East, NMPM, and Sections 6, 7, 8, 9, 16, 17, 18, 19, 20, 29, and 30, Township 18 South, Range 34 East, NMPM, all in Lea County, New Mexico.
- (7) Applicant does not seek to amend the injection authority for its associated Central EK Queen Unit Waterflood Project, approved by Division Order No. R-9885-A,

issued in Case No. 10648 on April 27, 1993, by extending the injection interval to correspond to the unit agreement at this time.

- (8) Seely did not include all of the EK-Yates-Seven River-Queen Pool initially, but confined the unit and secondary recovery project to that narrow interval in the Queen formation defined in Finding Paragraph No. (3), believing that this was the only oil productive interval in this pool within the immediate area. Currently, Seely plans to keep the Queen waterflood interval separate from any Yates and/or Seven Rivers production; however, future plans may make it necessary to amend the injection authority when such zones are allowed to communicate.
- (9) It has been determined by the applicant that the reserves in the Yates and Seven Rivers formations, while they may be productive and can be produced with an economic return for the operator from existing wells, would not be economic if a new stand alone well were drilled only for those undeveloped reserves.
- (10) The applicant anticipates that 100 percent of the working interest and royalty interest will agree to the proposed expansion of the unitized formation.
  - (11) No interest owner appeared at the hearing in opposition to this application.
- (12) Approval of the proposed amendment will allow the applicant the opportunity to recover hydrocarbons which may otherwise not be recovered, thereby preventing waste, and will not violate correlative rights.
- (13) Pursuant to Part (4) of the Central EK Queen Unit Agreement, the applicant is in the process of obtaining approval for the proposed amendment from the Commissioner of Public Lands for the State of New Mexico.

#### IT IS THEREFORE ORDERED THAT:

- (1) The application of Seely Oil Company ("Seely") for an amendment to the EK Queen Unit Agreement (originally approved by Division Order No. R-9885, issued in Case No. 10647 on April 27, 1993) to provide for expansion of the "Unitized Formation" is hereby granted.
- (2) The "Unitized Formation" shall hereinafter comprise the EK-Yates-Seven Rivers-Queen Pool, which shall be defined as that stratigraphic interval occurring from the top of the Yates sand at approximately 3,240 feet to the base of the Queen formation at 4,770 feet in the General American Operating Company Santa Se State Well No. 2, now known as

Seely's EK Queen Unit Well No. 2 (**API No. 30-025-29570**), located 330 feet from the North line and 990 feet from the East line (Unit A) of Section 18, Township 18 South, Range 34 East, NMPM, Lea County, New Mexico, as recorded on the Welex Compensated Density Dual Spaced Neutron Log dated January 20, 1986

- (3) The expansion of the "Unitized Formation" shall become effective as per the terms of Part (4) of the Central EK Queen Unit Agreement and upon approval of such expansion by the Commissioner of Public Lands for the State of New Mexico.
- (4) The applicant shall file with the Santa Fe office of the Division copies of the "Amendment to the Unit Agreement for the Central EK Queen Unit Area" executed by the various working interest owners in the Unit.
- (5) Prior to commencing any future waterflood operations that include these expanded vertical limits, the unit operator must apply for and obtain proper authority to extend the provisions of Division Order No. R-9885-A to include such extended interval.
- (6) Jurisdiction of this case 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

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Director