

ADMINISTRATIVE ORDER NO. WFX-732

APPLICATION OF SDX RESOURCES, INC. TO EXPAND ITS WATERFLOOD PROJECT IN THE EAST MILLMAN QUEEN-GRAYBURG POOL IN EDDY COUNTY, NEW MEXICO

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-2405 as amended, SDX Resources, Inc. has made application to the Division on October 27, 1997 for permission to expand its East Millman Unit Waterflood Project in the East Millman Queen-Grayburg Pool in Eddy County, New Mexico.

THE DIVISION DIRECTOR FINDS THAT:

(1) The application has been filed in due form.

(2) Satisfactory information has been provided that all offset operators have been duly notified of the application.

(3) No objection has been received within the waiting period as prescribed by Rule 701(B).

(4) The proposed injection wells are eligible for conversion to injection under the terms of Rule 701.

(5) The proposed expansion of the above referenced waterflood project will not cause waste nor impair correlative rights.

(6) The application should be approved.

IT IS THEREFORE ORDERED THAT:

The applicant, SDX Resources. Inc., be and the same is hereby authorized to inject water into the Queen and Grayburg formations at approximately 1682 feet to approximately 2568 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforations in the wells described on Exhibit "A" attached hereto, for purposes of secondary recovery.

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IT IS FURTHER ORDERED THAT:

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.

Prior to commencing injection operations into the wells, the casing shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge at the surface or left open to the atmosphere to facilitate detection of leakage in the casing, tubing or packer.

The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to .2 psi per foot of depth to the uppermost injection perforations of each well as indicated on Exhibit 'A'.

The Director of the Division may authorize an increase in injection pressure upon a proper showing by the operator of said wells that such higher pressure will not result in migration of the injected fluid from the Queen or Grayburg formations. Such proper showing shall consist of a valid step-rate test run in accordance with and acceptable to this office.

The operator shall notify the supervisor of the Artesia district office of the Division of the date and time of the installation of injection equipment and of the mechanical integrity tests so that the same may be inspected and witnessed.

The operator shall immediately notify the supervisor of the Artesia district office of the Division of the failure of the tubing, casing or packer in said wells and shall take such steps as may be timely and necessary to correct such failure or leakage.

The subject wells shall be governed by all provisions of Division Order No. R-2405 and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

<u>PROVIDED FURTHER THAT</u>, jurisdiction is retained by the Division for the entry of such further orders as may be necessary for the prevention of waste and/or protection of correlative rights or upon failure of the operator to conduct operations (1) to protect fresh water or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the injection authority granted herein. Administrative Order WFX-732 SDX Resources, Inc. February 18, 1998 Page 3

The injection authority granted herein 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.

DONE at Santa Fe, New Mexico, on this 18th day of February, 1998.

STATE OF NEW MEXICO OIL CONSERVATION DIVISION

Toxi Wrotenberg

Director

SEAL

LW/BES/kv

Oil Conservation Division - Artesia cc: Case File No.2656

EXHIBIT "A" DIVISION ORDER NO. WFX-732 EAST MILLMAN UNIT WATERFLOOD PROJECT APPROVED INJECTION WELLS

Well Name	Well No.	Location	Unit	S-T-R	Injection Interval	Packer Depth	Tubing Size	Pressure Gradient	Injection Pressure
East Millman Unit	158	1980' FNL & 1980' FEL	G	22-19S-28E	1878'-2568'	1778'	2 3/8"	.2 psi/ft	376 PSIG
East Millman Unit	203	10' FNL & 1310' FEL	в	22-19S-28E	1840'-2180'	1740'	2 3/8"	.2 psi/ft	368 PSIG
East Millman Unit	208	1360' FNL & 1310' FEL	Н	22-19S-28E	1682'-2290'	1582'	2 3/8"	.2 psi/ft	336 PSIG
East Millman Unit	212	1310' FSL & 1310' FEL	Р	15-19S-28E	1920'-2283'	1820'	2 3/8"	.2 psi/ft	384 PSIG

All wells in Eddy County, New Mexico