

STATE OF NEW MEXICO

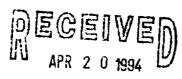
#### ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

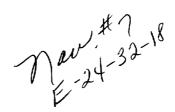


BRUCE KING GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY



OIL CON. DIV.



POST OFFICE BOX 2088 STATE LAND OFFICE BUILDING SANTA FE, NEW MEXICO 87504 (505) 827-5800

ADMINISTRATIVE ORDER NO. WFX-659

APPLICATION OF 21<sup>ST</sup> CENTURY INVESTMENT COMPANY TO EXPAND ITS WATERFLOOD PROJECT IN THE MESA-GALLUP OIL POOL IN SAN JUAN COUNTY, NEW MEXICO

# ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Order No. R-8966, 21<sup>st</sup> Century Investment Company has made application to the Division on March 2, 1994 for permission to expand its Mesa Gallup Unit Waterflood Project in the Mesa-Gallup Oil Pool in San Juan 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, 21st Century Investment Company, be and the same is hereby authorized to inject water into the Gallup formation at approximately 1223 feet to approximately 1438 feet through 2 3/8-inch plastic lined tubing set in a packer located within 100 feet of the uppermost injection perforation in the wells shown on Exhibit "A" attached hereto for the purposes of secondary recovery.

## 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 in each well shall be pressure tested from the surface to the packer setting depth to assure the integrity of said casing.

The casing-tubing annulus in each well 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 wells or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection wells to no more than that shown 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 Gallup formation. 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 Aztec 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 Aztec 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-8966, and Rules 702-706 of the Division Rules and Regulations not inconsistent herewith.

Prior to commencing injection operations into the wells shown on Exhibit "A", the applicant shall be required to obtain the appropriate Federal and/or Indian injection permits in accordance with the requirements of 40 CFR Part 147.

PROVIDED FURTHER THAT, jurisdiction of this cause is hereby retained by the Division for the entry of such further order or orders as may be deemed necessary or convenient for the prevention of waste and/or protection of correlative rights; upon failure of the operator to conduct operations in a manner which will ensure the protection of fresh water or in a manner inconsistent with the requirements set forth in this order, the Division may, after notice and hearing, terminate the injection authority granted herein.

DONE at Santa Fe, New Mexico, on this 12th day of April, 1994.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

WILLIAM J. LEMAY Director

SEAL

cc: Oil Conservation Division - Aztec

US Bureau of Land Management - Farmington

EXHIBIT "A"
DIVISION ORDER NO. WFX-659
MESA GALLUP UNIT WATERFLOOD PROJCT
APPROVED INJECTION WELLS

Well Name	Well No.	Location	Unit	S-T-R	Injection Perforations	Packer Depth	Tubing Size	Injection Pressure (PSIG)
Navajo "	1	1700' FNL - 685' FEL	Н	H 15-32N-18W	1223' - 1238'	1200'	2 3/8"	245
Navajo "🏋	7	2310' FNL - 330' FWL	Ε	E 24-32N-18W 1427' - 1438'	1427' - 1438'	1380' 2 3/8"	2 3/8"	285
Navajo".C"	3	330' FSL - 2310' FEL	0	O 14-32N-18W 1312' - 1320'	1312' - 1320'	1260' 2 3/8"	2 3/8"	262