

STATE OF NEW MEXICO

ENERGY AND MINERALS DEPARTMENT OIL CONSERVATION DIVISION

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APPLICATION OF GEO-ENGINEERING TO EXPAND ITS WATERFLOOD PROJECT IN THE CHACO WASH-MESAVERDE POOL IN McKINLEY COUNTY, NEW MEXICO.

ORDER No.WFX-536

ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Under the provisions of Order No. R-6538, Geo-Engineering has made application to the Division on November 9, 1984, for permission to expand its Chaco Wash-Mesaverde Waterflood Project in the Chaco Wash-Mesaverde Oil Pool in McKinley County, New Mexico.

NOW, on this 7th day of December, 1984, the Division Director finds:

- 1. That application has been filed in due form.
- 2. That satisfactory information has been provided that all offset operators have been duly notified of the application.
- 3. That no objection has been received within the waiting period as prescribed by Rule 701B.
- 4. That the proposed injection well is eligible for conversion to water injection under the terms of Rule 701.
- 5. That the proposed expansion of the above referenced Waterflood project will not cause waste nor impair correlative rights.
 - 6. That the application should be approved.

IT IS THEREFORE ORDERED:

That the applicant, Geo-Engineering, be and the same is hereby authorized to inject water into the Mesaverde formation through plastic-lined tubing set in a packer at a maximum of 50 feet from the uppermost injection interval in each well in the following described wells for purposes of waterflooding to wit:

CHACO WASH-MESAVERDE WATERFLOOD PROJECT	MAXIMUM SURFACE INJECTION PRESSURE
State Lease 2779 Well No. 26 620' FNL and 1965' FEL, Section 28, Township 20 North, Range 9 West McKinley County, New Mexico	60 Psig
State Lease 2779 Well No. 27 940' FNL and 1965' FEL, Section 28 Township 20 North, Range 9 West McKinley County, New Mexico	57 Psig
State Lease LG 2779 Well No. 40 165' FNL and 1965' FEL, Section 28, Township 20 North, Range 9 West McKinley County, New Mexico	58 Psig
Santa Fe Pacific Lease Well No. 41 400' FSL and 165' FWL, Section 22 Township 20 North, Range 9 West McKinley County, New Mexico	65 Psig
Santa Fe Pacific Lease Well No. 42 75' FSL and 165' FWL, Section 22 Township 20 North, Range 9 West McKinley County, New Mexico	65 Psig
Santa Fe Pacific Lease Well No. 43 300' FNL and 165' FWL, Section 27 Township 20 North, Range 9 West McKinley County, New Mexico	64 Psig

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.

That 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.

That the injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 0.20 psi per foot of depth to the uppermost injection interval in each well. Note list of wells for specific maximum injection pressures.

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

That the operator shall notify the supervisor of the Division's Aztec District Office before injection is commenced through said wells.

That the operator shall immediately notify the Supervisor of the Division's Aztec District Office of the failure of the tubing, casing, or packer in said wells or the leakage of water from or around said wells and shall take such steps as may be timely or necessary to correct such failure or leakage.

That the subject wells shall be governed by all provisions of Division Order No. R-6538 and Rules 702, 703, 704, 705, and 706 not inconsistent herewith.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.

STATE OF NEW MEXICO

OIL CONSERVATION DIVISION

R. L. STAMETS,

Director

SEAL