

State of New Mexico
Energy, Minerals and Natural Resources Department

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Oil Conservation Division



Administrative Order WFX-936
and
Administrative Order WFX-243 (**Reaffirmed**)
February 2, 2015

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Commission Order No. R-3226, Ray Westall Operating, Inc. (OGRID No. 119305) has made application to the Division for permission to add three new injection wells to its Taylor Unit Waterflood Project (TUWP) in the Shugart; Yates-Seven Rivers-Queen-Grayburg Pool (Pool code 56439) in Eddy County, New Mexico. The three wells are being proposed for injection to enhance recovery within the TUWP. In addition to the application for the conversion of the wells, the injection authority for three existing injection wells within the Taylor Unit is being reaffirmed due to the unavailability of the original order.

THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division Rule 19.15.26.8B. NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections remain outstanding. The applicant has presented satisfactory evidence that all requirements prescribed in Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Rule 19.15.5.9 NMAC.

The proposed expansion of the above-referenced waterflood project, will prevent waste, is in the best interests of conservation, will not impair correlative rights, and should be approved.

IT IS THEREFORE ORDERED THAT:

Ray Westall Operating, Inc., as operator, is hereby authorized to inject water into the following existing wells for the purpose of secondary recovery through plastic-lined tubing set into a packer:

| API No. | Well | Unit | Sec | Twp | Rng | Footage N/S | Footage E/W | Injection Interval (in ft.) | Maximum Surface Injection Pressure |
|--------------|-----------------------|------|-----|------|------|----------------|----------------|-----------------------------------|---|
| 30-015-05526 | Taylor Unit No. 4 | L | 12 | 18 S | 31 E | 1980 FSL | 660 FWL | Open hole: 3295 to 3572 | 654 psi |
| 30-015-05534 | Taylor Unit No. 13 | D | 13 | 18 S | 31 E | 660 FNL | 660 FWL | Open hole: 3461 to 3562 | 692 psi |
| 30-015-26660 | Taylor Unit No. 17 | J | 12 | 18 S | 31 E | 2310 FSL | 2180 FEL | Perforations: 3586 to 3596 | 717 psi |

The approved injection interval for the three wells shall be within the Unitized Formation as described in the unit agreement and approved in Ordering Paragraph (1) of Commission Order No. R-3226 dated May 3, 1967. The Unitized Formation is described as the interval from a depth of "200 feet above the top of the Queen sand to 50 feet below the base of the Queen sand and being the same vertical interval encountered between the actual depths of 3290 feet and 3595 feet", as found on the radioactivity log dated July 21, 1959, from the Maxwell Oil Company's A. C. Taylor "B" Well No. 4 (API No. 30-015-05538) located in Unit letter L, Section 13, Township 18 South, Range 31 East, NMPM.

The approved maximum surface injection pressure shall be the approved pressures listed for the individual wells in the two tables. The operator shall set the injection packer in individual wells no more than 100 feet above the shallowest perforation or top of open hole for the permitted injection interval.

The following active injection wells were approved for the purpose of secondary recovery in the TUWP under Administrative Order WFX-243. However, a copy of this order is not available; therefore, the Division shall reaffirm the injection authority of these wells in conjunction with the issuance of Order WFX-936.

| API No. | Well | Unit | Sec | Twp | Rng | Footage N/S | Footage E/W | Injection Interval (in ft.) | Maximum Surface Injection Pressure |
|--------------|-----------------------|------|-----|------|------|----------------|----------------|-----------------------------------|---|
| 30-015-05527 | Taylor Unit No. 7* | N | 12 | 18 S | 31 E | 660 FSL | 1980 FWL | Perforations: 3469 to 3470 | 694 psi |
| 30-015-05528 | Taylor Unit No. 9 | P | 12 | 18 S | 31 E | 660 FSL | 660 FEL | Open hole: 3409 to 3620 | 682 psi |
| 30-015-05539 | Taylor Unit No. 15 | F | 13 | 18 S | 31 E | 1980 FNL | 1980 FWL | Open hole: 3408 to 3558 | 682 psi |

*As noted in application and well file, original name is the A. C. Taylor "A" Well, No. 3 and identified as the initial injection well for the waterflood project in Commission Order No. R-133 (which was superseded by Commission Order No. R-3226).

IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the injected fluid enters only the approved injection interval and is not permitted to escape to other formations or onto the surface.

After installing tubing, the casing-tubing annulus shall be loaded with an inert fluid and equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The casing shall be pressure tested from the surface to the packer setting depth to assure casing integrity.

The well shall pass an initial mechanical integrity test ("MIT") prior to initially commencing injection and prior to resuming injection each time any injection packer is unseated. All MIT procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC. The Division Director retains the right to require at any time wireline verification of completion and packer setting depths in this well.

The wellhead injection pressure on these wells shall be limited as listed above. In addition, the injection well or header system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressures to the maximum allowable pressures for these wells.

Subject to the limitations within the hearing order permitting this project, the Director of the Division may authorize an increase in tubing pressure upon a proper showing by the operator of said well that such higher pressure will not result in migration of the injected fluids from the approved injection interval. Such proper showing shall be demonstrated by sufficient evidence including but not limited to an acceptable Step-Rate Test.

The operator shall notify the supervisor of the Division's District II office of the date and time of the installation of injection equipment and of any MIT test so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of injection to the District II office. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with Rules 19.15.26.13 and 19.15.7.24 NMAC.

Without limitation on the duties of the operator as provided in Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the District II office of any failure of the tubing, casing or packer in the approved injection well, or of any leakage or release of water, oil or gas from around any produced or plugged and abandoned well in the area, and shall take such measures as may be timely and necessary to correct such failure or leakage.


The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

The Division may revoke this injection permit after notice and hearing if the operator is in violation of Rule 19.15.5.9 NMAC.

Compliance with this order does not relieve the operator of the obligation to comply with other applicable federal, state or local laws or rules, or to exercise due care for the protection of fresh water, public health and safety and the environment.

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 or protectable waters or (2) consistent with the requirements in this order, whereupon the Division may, after notice and hearing, terminate the disposal authority granted herein. The subject wells shall be governed by all provisions of Division Order No. R-3226 and associated administrative orders.

The injection authority granted herein shall terminate two (2) years after the effective date of this order if the operator has not commenced injection operations into at least one of the subject wells, provided however, the Division, upon written request by the operator received prior to the two-year deadline, may grant an extension thereof for good cause shown.


DAVID R. CATANACH
Director

DRC/prg

cc: Oil Conservation Division – Artesia District Office
Bureau of Land Management – Carlsbad Field Office
Case No. 3564