

State of New Mexico  
Energy, Minerals and Natural Resources Department

Susana Martinez  
Governor

David Martin  
Cabinet Secretary

Brett F. Woods, Ph.D.  
Deputy Cabinet Secretary

David R. Catanach, Division Director  
Oil Conservation Division



Administrative Order WFX-941  
February 2, 2015

**ADMINISTRATIVE ORDER  
OF THE OIL CONSERVATION DIVISION**

Under the provisions of Commission Order No. R-2846, Ray Westall Operating, Inc. (OGRID No. 119305) has made application to the Division for permission to add four injection wells to its Culwin Queen Unit Waterflood Project (CQUWP) in the Shugart; Yates-Seven Rivers-Queen-Grayburg Pool (Pool code 56439) in Eddy County, New Mexico. These wells are being proposed for conversion to injection to complement existing injection wells for enhanced oil recovery in the Queen formation of the CQUWP.

**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 Name                | Unit or Lot | Sec | Twp  | Rng  | Footage N/S | Footage E/W | Approved Injection Interval (in ft.) | Maximum Surface Injection Pressure |
|--------------|--------------------------|-------------|-----|------|------|-------------|-------------|--------------------------------------|------------------------------------|
| 30-015-05653 | Culwin Queen Unit No. 6  | L           | 31  | 18 S | 31 E | 1980 FSL    | 592 FWL     | 3315 to 3423                         | 663 psi                            |
| 30-015-05748 | Culwin Queen Unit No. 14 | 4           | 6   | 19 S | 31 E | 330 FNL     | 330 FWL     | 3119 to 3143                         | 624 psi                            |
| 30-015-04586 | Culwin Queen Unit No. 15 | H           | 1   | 19 S | 30 E | 1980 FNL    | 660 FEL     | 3090 to 3118                         | 618 psi                            |
| 30-015-04585 | Culwin Queen Unit No. 17 | J           | 1   | 19 S | 30 E | 1980 FSL    | 1980 FEL    | 3080 to 3112                         | 616 psi                            |

The approved maximum surface injection pressure shall be based on a gradient of 0.2 pounds per square inch (psi) and limited to the pressure listed for the individual wells in the previous table. The operator shall set the injection packer in individual wells no more than 100 feet above the shallowest perforation for the permitted injection interval.

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 Division 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.

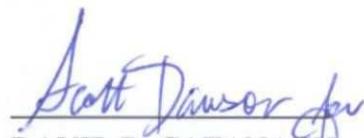
The injection authority granted under this order is not transferable except upon Division approval. The Division may require the operator to demonstrate mechanical integrity of any injection well that will be transferred prior to approving transfer of authority to inject.

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 Order No. R-2846 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: Conservation Division – Artesia District Office  
Bureau of Land Management – Carlsbad Field Office  
Case No. 3155