# 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 SWD-1596 November 6, 2015

## ADMINISTRATIVE ORDER OF THE OIL CONSERVATION DIVISION

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Raz Oil and Gas, LLC (the "operator") seeks an administrative order to re-enter and re-complete the YO State SWD Well No. 2 with a location 660 feet from the North line and 1650 feet from the East line, Unit letter B of Section 15, Township 21 South, Range 35 East, NMPM, Lea County, New Mexico, for the commercial disposal of produced water. This well was formerly named the Julia 15 State Com. Well No. 1.

#### THE DIVISION DIRECTOR FINDS THAT:

The application has been duly filed under the provisions of Division rule 19.15.26.8(B) NMAC and satisfactory information has been provided that affected parties as defined in said rule have been notified and no objections have been received. 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.

#### IT IS THEREFORE ORDERED THAT:

The applicant, Raz Oil and Gas, LLC (OGRID 370507) is hereby authorized to utilize its YO State SWD Well No. 2 (API No. 30-025-35910) with a location 660 feet from the North line and 1650 feet from the East line, Unit letter B of Section 15, Township 21 South, Range 35 East, NMPM, Lea County, New Mexico, for commercial disposal of oil field produced water (UIC Class II only) through a perforated interval within the Cherry Canyon formation and upper Brushy Canyon formation from 6550 feet to 7080 feet. Injection shall occur through 4½-inch or smaller, internally-coated tubing and a packer set a maximum of 100 feet above the top perforation.

## IT IS FURTHER ORDERED THAT:

The operator shall take all steps necessary to ensure that the disposed water enters only the approved disposal interval and is not permitted to escape to other formations or onto the surface. This includes the well construction proposed and described in the application, modification included in this order and, if necessary, as modified by the District Supervisor.

Prior to the installation of 7-inch casing patch and cement for the YO State SWD Well No. 2 (API No. 30-025-35910), the operator shall remedial cement the 9%-inch casing from the current cement top of 3934 feet to surface. If the cement is not circulated to surface, the operator shall tie

with the 13<sup>\*</sup>/<sub>8</sub>-inch surface casing (set at 1395 feet) a minimum of 300 feet above the 13<sup>\*</sup>/<sub>8</sub>-inch casing shoe. The operator shall run a cement bond log of the 9<sup>\*</sup>/<sub>8</sub>-inch casing following the remedial cementing and provide copies to the Division's District I office and the Santa Fe Bureau office prior to commencing injection.

The operator shall re-complete the YO State SWD Well No. 2 (API No. 30-025-35910) as proposed with the 7-inch production casing cemented from the patch to surface and <u>shall include</u>, <u>in the remedial cementing, the existing open annulus of the 7-inch production casing from 100</u> <u>feet below the top of the Bone Spring formation at 7366 feet</u>. The operator shall run a cement bond log of the <u>entire</u> 7-inch casing (including the existing portion of the 7-inch casing in the abandoned well) and provide copies to the Division's District I office and the Santa Fe Bureau office prior to commencing injection. If the remedial cement work either does not properly seal the new patch of the 7-inch casing or the existing cement for the 7-inch casing does not properly seal the approved injection interval, the operator shall prepare an alternative plan for remediating the casing cement.

The operator shall conduct a swab or production test of the approved injection interval for hydrocarbon potential and shall obtain a water sample for analysis of hydrocarbon content as well as general water chemistry (including major cations, major anions, and Total Dissolved Solids (TDS)). The Division's District I office shall be noticed prior to this test and given the opportunity to witness the test. The operator shall supply the results of the water sample to Division's District I office and Santa Fe Bureau office prior to commencing injection.

The operator shall complete the listed corrective actions for the following well within the Area of Review:

#### State WE K Well No. 1 (API 30-025-22004)

**Corrective Action:** operator will re-enter and emplace a sufficient volume of cement in the annulus of 7-inch production casing to seal the open annulus from 8350 feet to surface. If the cement is not circulated to surface, the operator shall tie with the 9%-inch casing (set at 5350 feet) a minimum of 500 feet above the 9%-inch casing shoe.

The operator shall prepare a cementing plan for the corrective action and submit the plan as a Sundry Notice of Intent to the Division's District I office for approval. Following completion of the remedial cement work, the operator shall run a cement bond log to verify the cement placement. If either Raz Oil and Gas, LLC acquires ownership of this well and does not intend to return the well to beneficial use, or the current operator of the well consents to permanent abandonment, then Raz Oil and Gas, LLC shall submit a Sundry Notice of Intent for approval of the Division's District I office to plug and abandon this well under Division rule 19.15.25.10 NMAC. <u>Prior to commencing injection</u>, the operator shall submit copies to the Division's District I office and the Santa Fe Bureau office of the cement bond log (or equivalent) for the AOR well. Failure to comply with the requirements detailed above shall result **ipso facto** in the loss of disposal authority approved by this Order.

Within two years after commencing disposal, the operator shall conduct an injection survey, consisting of a temperature log or equivalent, over the entire injection interval using representative disposal rates. Copies of the survey results shall be provided to the Division's District I office and Santa Fe Bureau office.

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 disposal and prior to resuming disposal each time the disposal packer is unseated. All MIT procedures and schedules shall follow the requirements in Division rule 19.15.26.11(A) 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 the well shall be limited to **no more than 1310 psi**. In addition, the disposal well or system shall be equipped with a pressure limiting device in workable condition which shall, at all times, limit surface tubing pressure to the maximum allowable pressure for this well. At the discretion of the supervisor of the Division's District I office, the operator shall install and maintain a chart recorder showing casing and tubing pressures during disposal operations.

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 disposed fluid from the target formation. 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 I office of the date and time of the installation of disposal equipment and of any MIT so that the same may be inspected and witnessed. The operator shall provide written notice of the date of commencement of disposal to the Division's District I 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.

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 order after notice and hearing if the operator is in violation of rule 19.15.5.9 NMAC.

The disposal authority granted herein shall terminate two (2) years after the effective date of this Order if the operator has not commenced injection operations into the subject well. One year after the last date of reported disposal into this well, the Division shall consider the well abandoned, and the authority to dispose will terminate *ipso facto*. The Division, upon written request mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

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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.

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DAVID R. CATANACH Director

DRC/prg

cc: Oil Conservation Division – Hobbs District Office State Land Office – Oil, Gas and Minerals Division