

State of New Mexico
Energy, Minerals and Natural Resources Department

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Governor

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Adrienne Sandoval, Director
Oil Conservation Division



Administrative Order SWD-1784
May 8, 2019

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, Strata Production Co. (the “operator”) seeks an administrative order for its Sandy Federal SWD Well No. 10 (the “proposed well”) with a location of 2430 feet from the North line and 460 feet from the West line, Unit letter E of Section 24, Township 23 South, Range 30 East, NMPM, Eddy County, New Mexico, for the purpose of produced water disposal.

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 have been notified. One protest of this application was received within the prescribed waiting period but was later withdrawn as result of a negotiated resolution. The applicant has presented satisfactory evidence that all requirements prescribed in Division Rule 19.15.26.8 NMAC for a radius of ½-mile from the surface location of the proposed well been met. Further, the operator is in compliance with Division Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, Strata Production Co. (OGRID 21712), is hereby authorized to utilize its Sandy Federal SWD Well No. 10 (API 30-015-Pending) located 2430 feet from the North line and 460 feet from the West line, Unit E of Section 24, Township 23 South, Range 30 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) through an open hole interval within the Devonian formation from approximately 15800 feet to approximately 16500 feet. Injection will occur through internally-coated, 4-½-inch or smaller tubing with a packer set within 100 feet of the top of the disposal interval. This permit does not allow disposal into:

1. The Woodford Shale and formations above the lower contact of the Woodford Shale;
2. Formations below the Silurian formations including the Montoya formation and the Ellenburger formation (lower Ordovician); and
3. Any lost circulation intervals directly on top and obviously connected to these formations.

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 completion and construction of the well as proposed in the application and, if necessary, as modified by the District Supervisor or the Bureau of Land Management.

The proposed well shall be limited to produced water from wells operated by the Applicant only. Further, the injection rate shall be limited to a maximum of 15,000 barrels of water per day (15,000 BWPD). If the Applicant fails to meet any one of these requirements, this order shall be null and void. Lastly, if the Applicant wishes to amend these requirements, it must apply for a new permit.

The injection authority granted under this order is not transferable to another operator (“OGRID”). 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.

Prior to commencing disposal, the operator shall submit mudlog and geophysical logs information, to the Division’s District geologist and Santa Fe Bureau Engineering office, showing evidence agreeable that only the permitted formation is open for disposal including a summary of depths (picks) for contacts of the formations which the Division shall use to amend this order for a final description of the depth for the injection interval. If significant hydrocarbon shows occur while drilling, the operator shall notify the Division’s District II and the operator shall be required to receive written permission prior to commencing disposal.

If cement does not circulate on any casing string, the operator shall run a cement bond log (CBL) or other log to determine top of cement and shall notify the Artesia District Office with the top of cement on the emergency phone number prior to continuing with any further cement activity with the proposed well. If cement did not tie back in to next higher casing shoe, the operator shall perform remedial cement action to bring cement, at a minimum, 200 feet above the next higher casing shoe.

Operator shall cement to surface all surface and intermediate casings.

Prior to commencing disposal, the operator shall obtain a bottom-hole pressure measurement representative of the open-hole completion. This information shall be provided with the written notice of the date of commencement of disposal.

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.

Without limitation on the duties of the operator as provided in Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District II office of any failure of the tubing, casing or packer in the 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.

If the disposal well fails a MIT or if there is evidence that the mechanical integrity of said well is impacting correlative rights, the public health, any underground sources of fresh water, or the environment, the Division Director shall require the well to be shut-in within 24 hours of discovery and the operator shall redirect all disposal waters to another facility. The operator shall take the necessary actions to address the impacts resulting from the mechanical integrity issues in accordance with Division Rule 19.15.26.10 NMAC, and the well shall be tested pursuant to Rule 19.15.26.11 NMAC prior to returning to injection.

The wellhead injection pressure on the well shall be limited to **no more than 3116 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.

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 formations. 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 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 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 Division Rules 19.15.29 and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's District II office of any failure of the tubing, casing or packer in the 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 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 one (1) year 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.

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.



Adrienne Sandoval
Director

AES/mam

cc: Oil Conservation Division – Artesia District Office
Bureau of Land Management - Carlsbad
Administrative Application – pMAM1826228780

Attachment: C-108 well completion diagram

General	Company: <i>Strata Production Company</i>	Prospect: <i>Forty Niner Ridge</i>
	Well Name: <i>Sandy Federal #10 SWD</i>	TD (MD/TVD): <i>16,500' TVD</i>
	County: <i>Eddy</i>	Elevation: <i>N/A</i>
	State: <i>New Mexico</i>	Latitude & longitude: <i>N/A</i>
	API Number: <i>N/A</i>	Section-Township-Range: <i>Section 24 - T23S - R30E</i>
	DIRECTIONS: From Loving, Go east to NM State Highway 128, turn right (toward Jal) and go 7 miles to mile marker 7, turn right at Mobley Ranch Road (CR 795), go ¼ mile to Y, take left fork and go 2.5 miles to lease road on left (look for Strata – Sandy Sign), turn left 2 miles, turn left at "T" and follow road ¼ mile to location.	
		Bottom Hole Location: <i>NA</i>

Hole size, casing specs, & depth	Casing Profile	
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<i>26" x 20" J-55 STC casing set @ 385' Cemented w/1000 sx circulated to surface</i>		<i>385</i>	
<i>17 1/2" x 13 3/8" 61# J-55 STC casing set @ 3800' Cemented w/1850 sx circulated to surface</i>		<i>3800</i>	
<i>DV Tool set @ 11,500'</i>			
<i>12 1/4" x 9 5/8" 43.5# HCL80 LTC casing set at 12,000' Cemented w/2100 sx circulated to surface</i>		<i>12000</i>	
<i>1st stage cement with 600 sx</i>			
<i>2nd stage cement with 1000 sx</i>			
<i>8 1/2" x 7" 26# HCP 110 LTC casing set @ 11,500'-15,600' Cemented with 600 sx</i>		<i>16500</i>	
<i>6 3/4" Open hole TD @ 16,500'</i>			
			<i>Injection String: 4 1/2" 13.50# L80 tubing IPC w/TK99</i>
			<i>Arrowset 1X Nickel Pltd Pkr set @ 15,500'</i>
		<i>External Csg Pkr set @ 15,580'</i>	
		<i>Injection Interval 15,545'-16,500'</i>	

Comments	