

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Ken McQueen
Cabinet Secretary

Matthias Sayer
Deputy Cabinet Secretary

Heather Riley, Division Director
Oil Conservation Division



Administrative Order SWD-1734
June 4, 2018

**ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION**

Pursuant to the provisions of Division Rule 19.15.26.8(B) NMAC, V-F Petroleum Inc. (the “operator”) seeks an administrative order for its Northcott Well No. 3 (the “subject well”) with a location of 1980 feet from the North line and 1980 feet from the East line, Unit letter G of Section 24, Township 19 South, Range 28 East, NMPM, Eddy County, New Mexico, for the purpose of commercial disposal of produced water.

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 and no objections have been received within the prescribed waiting period. The applicant has presented satisfactory evidence that all requirements prescribed in Division Rule 19.15.26.8 NMAC have been met and the operator is in compliance with Division Rule 19.15.5.9 NMAC.

IT IS THEREFORE ORDERED THAT:

The applicant, V-F Petroleum Inc. (OGRID 24010), is hereby authorized to utilize its Northcott Well No. 3 (API 30-015-22892) with a location of 1980 feet from the North line and 1980 feet from the East line, Unit letter G of Section 24, Township 19 South, Range 28 East, NMPM, Eddy County, for disposal of oil field produced water (UIC Class II only) through open-hole completion into an interval consisting of the Devonian formation from approximately 12060 feet to approximately 14000 feet. Injection will occur through internally-coated, 3½-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 formations below the Silurian formations including the Montoya formation and the Ellenburger formation (lower Ordovician) or lost circulation intervals directly on top and obviously connected to these formations.

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 I and the operator shall be required to receive written permission prior to commencing disposal.

Applicant shall squeeze all existing perforations in the Queen, Grayburg, and Seven Rivers formations prior to running the 5^{1/2}-inch casing.

If cement does not circulate on backside of the 5^{1/2}-inch casing, the operator shall run a cement bond log (CBL) or other log to determine top of cement and shall notify the Artesia District 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 circulate, the operator shall perform remedial cement job to bring cement to surface.

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 described in the application and, if necessary, as modified by the District Supervisor.

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 2412 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 II office. The operator shall submit monthly reports of the disposal operations that includes number of days of operation, injection volume, and injection pressure 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.

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.



HEATHER RILEY
Director

HR/mam

cc: Oil Conservation Division – Artesia District Office
New Mexico State Land Office Oil, Gas, and Minerals
Well file 30-015-22892

RANGE

~~(Perforated~~ or Open Hole; indicate which)

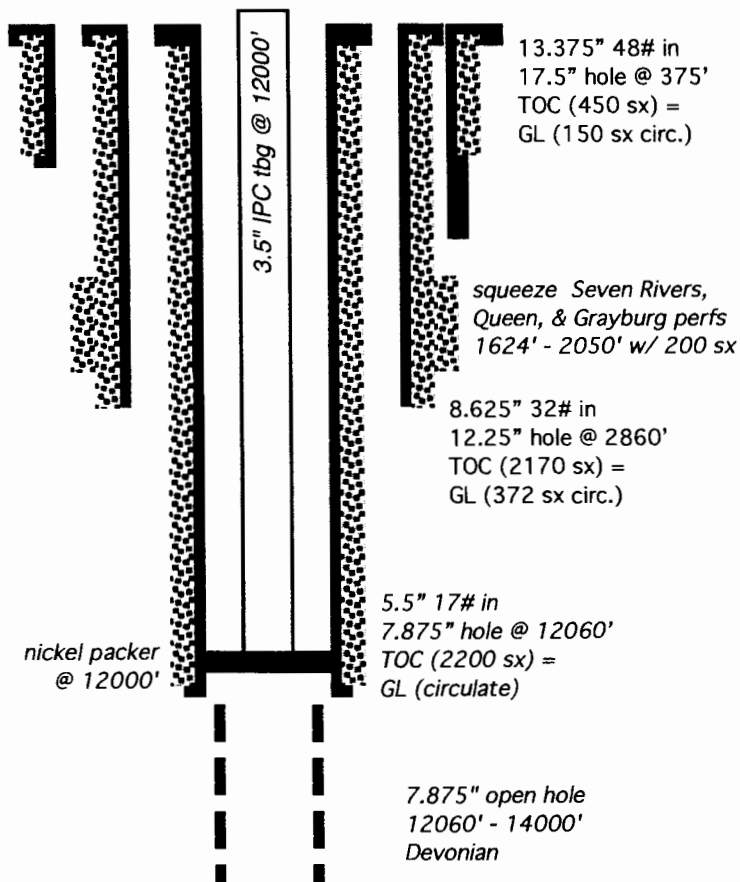
INJECTION WELL DATA SHEET

OPERATOR: V-F PETROLEUM INC.WELL NAME & NUMBER: NORTHCOTT 3

WELL LOCATION: <u>1980 FNL & 1980 FEL</u>	<u>G</u>	<u>24</u>	<u>19 S</u>	<u>28 E</u>
FOOTAGE LOCATION	UNIT LETTER	SECTION	TOWNSHIP	RANGE

WELLBORE SCHEMATIC

"Proposed"



TD
14000'
(not to scale)

WELL CONSTRUCTION DATASurface Casing

Hole Size: 17.5" Casing Size: 13.375"
 Cemented with: 450 sx. or ft³
 Top of Cement: SURFACE Method Determined: CIRC. 150 SX

Intermediate Casing

Hole Size: 12.25" Casing Size: 8.625"
 Cemented with: 2170 sx. or ft³
 Top of Cement: SURFACE Method Determined: CIRC. 372 SX

Production Casing

Hole Size: 7.875" Casing Size: 5.5"
 Cemented with: 2200 sx. or ft³
 Top of Cement: SURFACE Method Determined: CIRCULATE
 Total Depth: 12,060' (csg) & 14,000' (TD)

Injection Interval

7.875" HOLE SIZE 12,060 feet to 14,000'

~~(Perforated)~~ or Open Hole; indicate which)