State of New Mexico
Energy, Minerals and Natural Resources Department

Administrative Order WFX-940
November 25, 2014

ADMINISTRATIVE ORDER
OF THE OIL CONSERVATION DIVISION

Under the provisions of Division Orders No. R-9710 and No. R-9714, Chevron USA, Incorporated (OGRID No. 4323) has made application to the Division for approval of existing perforations for eighteen (18) injection wells within Vacuum Glorieta West Unit Waterflood Project located within the Vacuum; Glorieta Pool (Pool code 62160) in Lea County, New Mexico. Perforations were added to these injection wells to accommodate the use of dual packer systems in individual wells for better management of the waterflood project. These perforations correlate with the Unitized interval described in Ordering Paragraph (3) of Division Order No. R-9710.

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 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 our understanding that these wells are completed with dual packer systems that enhance production by isolating the Glorieta and Paddock formations for greater control of the waterflood operation. The addition of the perforations and the use of the dual packer systems in the 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:

Chevron USA, Inc., as operator, is hereby authorized to inject water for the purpose of secondary recovery into the approved injection interval (the existing perforated interval) of the eighteen wells listed in Exhibit "A". Injection shall occur through plastic or fiberglass lined tubing set into a packer system.

The approved maximum surface tubing injection pressure shall be no more than **1200 psi** (as provided for in Order No. R-9714) for VGWU Wells No. 9, No. 27, and No. 28. Two wells, No. 104 and No. 107, were approved for higher maximum pressures (**2200 psi and 1750 psi**, respectively) under an unnumbered administrative order issued October 15, 1996. The remaining

thirteen wells have an approved maximum surface tubing injection pressure of **2000 psi** under Administrative Order IPI-2 issued July 23, 1999. The operator shall set the **upper packer of the dual packer system** no more than 100 feet above the top perforation of the permitted injection interval for the individual well as listed in Exhibit "A".

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 wells shall pass an initial mechanical integrity test ("MIT") 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 these wells.

The wellhead injection pressure on these wells shall be limited to the approved maximum surface tubing injection pressure listed above. In addition, the injection wells or header systems 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 Division Director may authorize an increase in tubing pressure upon a proper showing by the operator of said wells 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 I office of the date and time of the installation of injection equipment and of any MIT so that the same may be inspected and witnessed. 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 I office of any failure of the tubing, casing or packer in the approved injection wells, 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 Division 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.

The subject wells shall be governed by all provisions of Division Order Nos. R-9710 and R-9714, and Division Rules 19.15.26.9 NMAC through 19.15.26.13 NMAC not inconsistent herewith.

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.

Scott Dawson for
JAMI BAILEY
Director

JB/prg

cc: Oil Conservation Division – Hobbs District Office
State Land Office – Oil, Gas and Minerals Division
Case No. 10516

EXHIBIT A
VACUUM GLORIETA WEST UNIT WATERFLOOD PROJECT
Approved Perforation Intervals for Injection Wells

API No.	Well No.	Unit	Sec.	Twp	Rng	Footage N/S	Footage E/W	Approved Injection (Perforated) Interval (in ft)
30-025-31835	Vacuum Glorieta West Unit No. 9	C	25	17 S	34 E	73 FNL	1411 FWL	5928 to 6068
30-025-31869	Vacuum Glorieta West Unit No. 27	I	26	17 S	34 E	2359 FSL	64 FEL	5860 to 6123
30-025-31784	Vacuum Glorieta West Unit No. 28	L	25	17 S	34 E	2304 FSL	1127 FWL	5860 to 5957
30-025-31699	Vacuum Glorieta West Unit No. 38	M	25	17 S	34 E	1217 FSL	24 FWL	5820 to 5936
30-025-31700	Vacuum Glorieta West Unit No. 39	M	25	17 S	34 E	1194 FSL	1055 FWL	5843 to 5956
30-025-31701	Vacuum Glorieta West Unit No. 40	K	25	17 S	34 E	1590 FSL	2404 FWL	5880 to 5974
30-025-31838	Vacuum Glorieta West Unit No. 41	J	25	17 S	34 E	1377 FSL	1646 FEL	5830 to 5990
30-025-31815	Vacuum Glorieta West Unit No. 42	M	30	17 S	35 E	1114 FSL	41 FWL	5932 to 5992
30-025-31870	Vacuum Glorieta West Unit No. 50	A	35	17 S	34 E	328 FNL	1214 FEL	5850 to 6100
30-025-31728	Vacuum Glorieta West Unit No. 51	A	35	17 S	34 E	24 FNL	101 FEL	5852 to 5948
30-025-31702	Vacuum Glorieta West Unit No. 52	N	25	17 S	34 E	65 FSL	1587 FWL	5881 to 5974
30-025-31703	Vacuum Glorieta West Unit No. 53	N	25	17 S	34 E	215 FSL	2350 FWL	5908 to 5993
30-025-31816	Vacuum Glorieta West Unit No. 54	O	25	17 S	34 E	51 FNL	1588 FEL	5914 to 6000
30-025-31704	Vacuum Glorieta West Unit No. 64	E	36	17 S	34 E	1484 FNL	204 FWL	5951 to 6109
30-025-31705	Vacuum Glorieta West Unit No. 65	F	36	17 S	34 E	1522 FNL	1492 FWL	5850 to 5905
30-025-31872	Vacuum Glorieta West Unit No. 77	H	35	17 S	34 E	2569 FSL	1226 FEL	5840 to 6020
30-025-31858	Vacuum Glorieta West Unit No.104	M	36	17 S	34 E	361 FSL	300 FWL	5890 to 6102
30-025-31884	Vacuum Glorieta West Unit No.107	O	36	17 S	34 E	183 FSL	931 FEL	5916 to 6212