

**STATE OF NEW MEXICO
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 15241
ORDER NO. R-13958**

**APPLICATION OF COBALT OPERATING, LLC. FOR AUTHORIZATION TO
INJECT, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on December 4, 2014, at Santa Fe, New Mexico, before Examiner Michael McMillan.

NOW, on this 19th day of February, 2015, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

(1) Due public notice has been given, and the Division has jurisdiction of this case and its subject matter.

(2) Cobalt Operating, LLC ("Applicant" , "Cobalt" or "Operator"), seeks authority to re-enter and utilize its Warren Well No. 2 (API No. 30-025-26953; the "subject well"), located 2200 feet from the North line and 880 feet from the East line, Unit letter H of Section 8, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico, for lease oil field water disposal into the Devonian formation through perforations from 11,760 feet to 11,875 feet, and an open-hole interval from approximately 11,875 feet to approximately 12,850 feet.

(3) On October 20, 2014, Cobalt submitted an administrative application (Application No. pMAM1429351209), to the Division for approval of this well for injection of produced water. Claudia Wilbourn and Kenneth Goff objected to the granting of this application. Accordingly, this application was referred to the hearing process.

(4) No other party appeared at the hearing to oppose the granting of this application.

(5) The Applicant appeared at the hearing through counsel and presented the following testimony:

- (a) The subject well is to be deepened to a total depth of 12,850 feet with a four (4)-inch diameter open hole from 11,875 feet to 12,850 feet. The injection interval will be approximately 115 feet of perforations, and 975 feet of open hole with the packer set in the five and half (5 1/2)-inch casing at approximately 11,660 feet.
- (b) The maximum surface pressure will be 2352 psi.
- (c) The produced waters going into the subject well would be from production from wells completed in the Devonian formation.
- (d) Hydrocarbon production in this area is found above the injection interval in the Strawn formation, as well as the Devonian formation.
- (e) Historical production and testing of the hydrocarbon zones in this area in the Devonian formation have very high water content resulting in abandonment of oil-producing wells.
- (f) The Applicant does not expect any waste of oil or gas to occur as a result of disposal into the Devonian formation.
- (g) The half-mile Area of Review around the subject well contains 10 wells, of which five penetrated the disposal interval.
- (h) The subject well is currently producing from the Devonian formation with a high water cut and a low oil volume; therefore, the well is uneconomical to produce.

The Division concludes as follows:

(6) Division records indicate that Cobalt Operating, LLC is not in compliance with Rule 19.15.5.9 NMAC. However, on September 2, 2014, Cobalt entered into Inactive Well Agreed Compliance Order (ACOI-291), in which Cobalt agreed to plug, place on approved temporary abandonment status, or restore to production or other beneficial purposes certain wells in the ACOI-291.

(7) The well to be converted to injection [Warren Well No.2 (API No. 30-025-26953)] is a marginal and stripper well, and has reached its economic abandonment limit. The Operator therefore has the right to use the well for other beneficial purposes.

(8) The Cobalt's Warren Well No. 1 (API No. 30-025-26323) is recompleted and producing from the Strawn formation, while the Hale State Well No. 1Y (API No. 30-025-26773) is recompleted and producing from the Devonian formation. The proposed injection well, the Warren Well No. 2, is stratigraphically low on structure from the producing zones which are the upper portions of the Devonian formation. Therefore,

injection of produced water into the Warren Well No. 2 as proposed will not affect hydrocarbon production from the Devonian formation.

(9) The Devonian formation is a good candidate for salt water disposal because of its permeability and porosity. The produced water from the Devonian formation will be disposed into the Devonian formation by this injection well in a closed loop system. There are no water compatibility issues.

(10) The injection well is adequately constructed to prevent the migration of the injected water upwards to underground sources of drinking water. The depth of fresh water sources in this area is between 200 to 300 feet. The surface casing in this well will be set at 378 feet with cement circulated to the surface. The intermediate casing will be set at 4,400 feet with cement circulated to the surface. The 5-1/2 inch production casing will be set at 11,875 feet with a calculated top of cement at 2,400 feet. The operator will be required to run a Cement Bond Log (CBL) to verify this top of cement.

(11) The plugged and abandoned wells in the area of review (AOR) are properly plugged and abandoned and should not act as conduits to underground sources of drinking water (USD)

(12) Claudia Wilburn and Kenneth Goff objected to administrative approval of this injection authority. Claudia Wilburn did not appear at the hearing. Mr. Kenneth Goff appeared at the hearing and presented no technical evidence that demonstrates that the conversion of this well to injection will contaminate his fresh water sources.

(13) There will be no waste of hydrocarbons and correlative rights will not be impaired by granting this injection authority.

(14) This application should be approved.

IT IS THEREFORE ORDERED THAT:

(1) Cobalt Operating, LLC ("Cobalt" or "Operator"), application for authorization to utilize its proposed Warren Well No. 2 (API No. 30-025-26953; the "subject well"), located 2200 feet from the North line and 880 feet from the East line, Unit letter H of Section 8, Township 17 South, Range 37 East, NMPM, Lea County, New Mexico, for lease oil field water disposal into the Devonian formation through perforations from approximately 11,760 feet to 11,875 feet, and an open-hole interval from approximately 11,875 feet to approximately 12,850 feet is hereby **approved**.

(2) The injection well shall be constructed with the surface casing set at 378 feet with cement circulated to the surface, and the intermediate casing shall be set at 4,400 feet with cement circulated to the surface. The operator shall set the 5-1/2 inch production casing at 11,875 feet, and run a cement bond log (CBL) to demonstrate that the actual top of cement on the production casing is 2,400 feet before commencing injection operations. The results of the CBL shall be reported to the Hobbs District Office.

of the Division. All previous perforations above the injection interval shall be properly squeezed and isolated with cast iron bridge plugs (CIBP).

(3) The Operator shall comply with the Inactive Well Agreed Compliance Order (ACOI-291), in which Cobalt agreed to plug, place on approved temporary abandonment status, or restore to production or other beneficial purposes certain wells in the ACOI-291, before commencing injection operations into this well.

(4) After installation of 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.

(5) The subject 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 testing procedures and schedules shall follow the requirements in Division Rule 19.15.26.11A. NMAC.

(6) The wellhead injection pressure on the well shall be limited to no more than **2352 psi**. In addition, the subject 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.

(7) 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.

(8) 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 test 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 injection operations shall be governed by Division Rules 19.15.26.1 through 19.15.26.15 NMAC. The operator shall submit monthly reports of the disposal operations on Division Form C-115, in accordance with rules 19.15.26.13 NMAC and 19.15.7.24 NMAC.

(9) Without limitation on the duties of the operator as provided in 19.15.29 NMAC and 19.15.30 NMAC, or otherwise, the operator shall immediately notify the Division's district 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 or 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.

(10) 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.

(11) The Division may revoke this injection permit after notice and hearing if the operator is in violation of 19.15.5.9 NMAC.

(12) The Division Director shall be authorized to amend this permit administratively after proper notice and opportunity for hearing.

(13) The disposal authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced injection operations into the subject well, provided however, the Division, upon written request, mailed by the operator prior to the termination date, may grant an extension thereof for good cause.

(14) One year after disposal into the subject well has ceased, the well will be considered abandoned and the authority to dispose will terminate ipso facto.

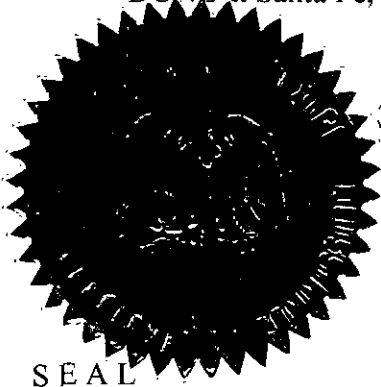
(15) Upon failure of the Operator to conduct operations (1) in such manner as will protect fresh water, or (2) in a manner consistent with the requirements in this order, the Division may, after notice and hearing, (or without notice and hearing in event of an emergency), subject to the provisions of NMSA 1978 Section 70-2-23, terminate the disposal authority granted herein.

(16) 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.

(17) The Operator shall provide written notice to the Division upon permanent cessation of the disposal operations.

(18) Jurisdiction is retained by the Division for the entry of such further orders as may be necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

David R. Catanach

DAVID R. CATANACH
Director