

**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. 15159  
ORDER NO. R-13922**

**APPLICATION OF BTA OIL PRODUCERS, LLC FOR APPROVAL OF A SALT  
WATER DISPOSAL WELL, LEA COUNTY, NEW MEXICO.**

**ORDER OF THE DIVISION**

This case came on for hearing at 8:15 a. m. on June 26, 2014, at Santa Fe, New Mexico, before Examiner Richard I. Ezeanyim.

NOW, on this 30<sup>th</sup> day of October, 2014, 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) The applicant, BTA Oil Producers, LLC ("BTA" "Applicant" or "Operator"), seeks approval to inject produced water for the purposes of disposal into its 9418 JV-P Vaca Draw Well No. 1 (**API No. 30-025-33639**), located 1980 feet from the South and West lines of Section 10, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico.
- (3) The Applicant proposes to dispose produced water into the Bell Canyon and upper Cherry Canyon formations of the Delaware Mountain Group at depths of approximately 5,062 to 6,750 feet subsurface.
- (4) The 9418 JV-P Vaca Draw Well No. 1 is currently producing minimal amount of oil and gas from the Wolfcamp formation. The Applicant intends to plug back to the Delaware Mountain Group and use the well for salt water disposal purposes.
- (5) In February 2014, the Applicant submitted an administrative application to the Division requesting to convert this well for salt water disposal purposes. The

Applicant provided notice of this application to all affected parties including the Bureau of Land Management (BLM) and the surface land owner.

(6) EOG Resources protested the application, but on June 17, 2014, withdrew its objection to the granting of the application.

(7) The BLM objected to the granting of this application on the grounds that the well is still producing in paying quantities. The surface land owner also objected to the granting of this application. Accordingly, this application was referred to the hearing process.

(8) At the hearing, BLM and the surface land owner did not appear to contest the application.

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

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

(a) The 9418 JV-P Vaca Draw Well No. 1 is currently producing small amounts of oil and gas from the Wolfcamp formation. The well is a stripper well and BTA intends to convert it to a salt water disposal well to dispose produced water from the Bone Spring formation.

(b) BTA intends to drill the following four (4) wells in Section 10, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico, to the Bone Spring formation.

Well Name	API Number
9418 JV-P Vaca Draw Well No. 2H	30-025-41621
9418 JV-P Vaca Draw Well No. 3H	30-025-41622
9418 JV-P Vaca Draw Well No. 4H	30-025-41623
9418 JV-P Vaca Draw Well No. 5H	30-025-41624

(c) The Applicant needs to dispose the produced water from these wells in the Bone Spring formation, and plans to plug back the 9418 JV-P Well No. 1 from the Wolfcamp formation to the Delaware formation, and use it for both lease and commercial salt water disposal purposes.

(d) The 9418 JV-P Vaca Draw Well No. 1 currently produces less than one (1) barrel of oil per day and less than 29 Mcf per day of gas, respectively.

(e) The Bone Spring waters to be disposed into the Delaware formation are compatible since both waters have similar dissolved solids content.

(f) The wells listed in Finding Paragraph (10.b) above will penetrate the injection interval into the Bone Spring formation, but they are outside the one-half mile area of review (AOR). There are no other wells within one-half mile area of review that penetrated the injection interval.

(g) The injection interval is overlain and underlain by confining barriers, so that the injected fluids will remain within the injection zone.

**The Division concludes as follows:**

(11) The BLM protested this application on the grounds that the well is still producing in paying quantities. As a result, the Applicant using decline curve analysis conducted the economic viability of this well to the economic limit.

(12) The analysis demonstrates that the well is truly a stripper well, and the cost of producing the well to abandonment will be greater than the revenues generated.

(13) The evidence submitted by the Applicant also demonstrates that if the well is not converted to a salt water disposal well, the cost of disposing the Bone Spring water from these new wells will be great. In addition, the Bone Spring formation is known to have very high water cuts.

(14) The Oil Conservation Division (OCD) is obligated to prevent waste, protect correlative rights, and protect the environment.

(15) The injection well is adequately constructed to prevent migration of the injected fluids to underground fresh water sources.

(16) There are no water wells in the area, and the surface casing which is set at 715 feet with cement circulated to the surface will protect the fresh water at an approximate depth of 600 feet.

(17) Division records indicate that BTA (OGRID 260297) is in compliance with Division Rule 19.15.5.9 NMAC as of the date of this order.

(18) The proposed conversion of this well to salt water disposal well should prevent waste and will not impair correlative rights.

(19) Accordingly, this application should be approved.

**IT IS THEREFORE ORDERED THAT:**

(1) BTA Oil Producers, LLC [OGRID 260297] ("BTA" "Applicant" or "Operator") is hereby authorized to inject produced water for the purpose of disposal into the Bell Canyon and upper Cherry Canyon formations of the Delaware Mountain Group, through its 9418 JV-P Vaca Draw Well No. 1 (API No. 30-025-33639), located 1980 feet

from the South and West lines of Section 10, Township 25 South, Range 33 East, NMPM, Lea County, New Mexico, in an injection interval at depths of approximately 5,062 feet and 6,750 feet below the surface.

(2) The well shall be constructed with the surface casing set at 715 feet with cement circulated to the surface, and with the intermediate casing set at 5,000 feet with cement circulated to the surface. The production casing shall be set at 12,575 feet with cement circulated to the surface. All previous perforations below the injection interval shall be properly squeezed and isolated with cast iron bridge plugs (CIBP).

(3) Operator shall take all steps necessary to ensure that the injected fluid enters only the disposal interval and is not permitted to escape to other formations or onto the surface from the injection well.

(4) Injection shall be accomplished through a plastic-lined steel tubing installed in a packer set in the tubing at an approximate depth of 5,045 feet, with the injection to be accomplished through perforated interval from 5,062 feet to 6,750 feet. The casing-tubing annulus shall be filled with an inert fluid, and a gauge or approved leak-detection device shall be attached to the annulus in order to detect leakage in the casing, tubing or packer.

(5) Prior to commencing injection operations, the casing in the disposal well shall be pressure tested throughout the interval from the surface down to the packer setting depth to assure the integrity of such casing.

(6) The maximum surface injection pressure shall be **1013 psi**. The injection well shall be equipped with a pressure control device or acceptable substitute that will limit the surface injection pressure to no more than the pressure authorized herein.

(7) The Division Director may administratively authorize an increase in injection pressure upon a showing by the operator that such higher pressure will not result in fracturing of the injection formation or confining strata.

(8) The operator shall give at least 72 hours advance notice to the supervisor of the Division's Hobbs District Office of the date and time (i) injection equipment will be installed, and (ii) the mechanical integrity pressure tests will be conducted, so these operations may be witnessed.

(9) The operator shall provide written notice of the date of the commencement of injection to the Hobbs District Office of the Division.

(10) The operator shall immediately notify the supervisor of the Division's Hobbs District Office of any failure of the tubing, casing or packer in the disposal well, or the leakage of water, oil, gas or other fluid from or around any producing, injection or abandoned well within ½ mile of the injection well, and shall take all steps as may be timely and necessary to correct such failure or leakage.

(11) 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 operation on Division Form C-115, in accordance with Division Rules 19.15.26.13 NMAC and 19.15.7.24 NMAC.

(12) The Division may revoke this injection order after notice and hearing if the Operator is in violation of Rule 19.15.5.9 NMAC.

(13) The injection authority granted under this order is not transferable except under 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.

(14) The injection authority granted herein shall terminate two years after the effective date of this order if the operator has not commenced disposal operations; provided, however, the Division Director, upon written request by the operator filed prior to the expiration of such time, may grant an extension for good cause. In accordance with Rule 19.15.26.12.C(1) NMAC, whenever there is a continuous one year period of non-injection into the injection well, the injection authority granted herein shall terminate **ipso facto**.

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

(16) This order does not relieve the Operator of responsibility should its operations cause any actual damage or threat of damage to protectable fresh water, human health or the environment, nor does it relieve the Operator of responsibility for complying with applicable Division rules or other state, federal or local laws or regulations.

(17) 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.

(18) This order is subject to approval by the Bureau of Land Management (BLM) before commencing the injection operations.

(19) Jurisdiction of this case is retained for the entry of such further orders as the Division may deem necessary.

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



SEAL

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in cursive script, appearing to read "Jami Bailey".

JAMI BAILEY  
Director