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

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

CASE NO. 12905

THE APPLICATION OF PRONGHORN MANAGEMENT
CORPORATION FOR APPROVAL OF A SALT WATER
DISPOSAL WELL, LEA COUNTY, NEW MEXICO.

ORDER NO. R-11855-B

ORDER OF THE OIL CONSERVATION COMMISSION

BY THE COMMISSION:

THIS MATTER came before the Oil Conservation Commission (hereinafter referred to as "the Commission") for evidentiary hearing on March 20, 2003 at Santa Fe, New Mexico on application of Pronghorn Management Corporation (hereinafter referred to as "Pronghorn"), *de novo*, opposed by DKD, L.L.C. (hereinafter referred to as "DKD"), and the Commission, having carefully considered the evidence, the pleadings and other materials submitted by the parties hereto, now, on this 15th day of May, 2003,

FINDS,

1. Notice has been given of the application and the hearing on this matter, and the Commission has jurisdiction of the parties and the subject matter herein.

2. This matter is before the Commission on application of Pronghorn for review *de novo*.

3. In this matter, Pronghorn seeks a permit pursuant to Rule 701 of the Rules and Regulations of the Oil Conservation Division, 19.15.9.701 NMAC (11-02-2000), to dispose of produced water into the San Andres and Glorieta formations. Pronghorn seeks to use the State "I" Well No. 2 (API No. 30-025-03735) for this purpose. Disposal is to be accomplished through 2 7/8 inch plastic-lined tubing set in a packer located at approximately 5,590 feet. DKD opposes the application on various grounds.

4. Before moving to the merits of the dispute, the subject of notice should be addressed. Notice was raised as an issue in the Oil Conservation Division's orders and the parties hereto presented evidence and testimony on the subject during the Division's proceeding (but not during the hearing *de novo*).

EXHIBIT
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5. An operator desiring to inject produced water must apply for a permit and serve a copy of the application on the "owner of the surface of the land upon which each injection or disposal well is to be located" and "each leasehold operator within one-half mile of the well" proposed for injection. *See* 19.15.9.701(A) and (B) NMAC.

6. Pronghorn filed such an application for administrative approval of its proposed operation on April 5, 2002. On April 30, 2002 the Oil Conservation Division (hereinafter referred to as "the Division") issued Administrative Order No. SWD-836 and granted the application. Such applications may be approved administratively unless an objection to the order is filed within fifteen days of the date of application. *See* 19.15.9.701(C) NMAC. DKD objected to the application and advised the Division that it operates a well within one-half mile of the State "T" Well No. 2. DKD also advised the Division that it had not been provided notice of the administrative application as required by Form C-108 and Rule 701, 19.15.9.701(B)(2) NMAC. The Division advised Pronghorn by letter of July 9, 2002 that Order No. SWD-836 would be suspended pending the outcome of a hearing before a Division examiner. On September 5, 2002, the Division conducted a hearing on the matter. The failure to provide notice to DKD apparently formed the basis for the Division's suspension of Order No. SWD-836.

7. Circumstances have changed substantially since the Division hearing. During the hearing *de novo* it became apparent that DKD was not in fact notified of the initial application, but it also became apparent that DKD was not a record "leasehold operator within one-half mile of the [proposed disposal] well" pursuant to Rule 701, 19.15.9.701(B)(2). Almost six weeks after the application was filed, an assignment from Chesapeake to DKD was recorded (May 14, 2002).[1] Moreover, the fact that the document was unrecorded strongly suggests that notice to DKD's predecessor-in-interest was appropriate. *See* NMSA 1978, § 70-1-2 (Repl. 1995)(effect of failure to record). Nevertheless, after being notified of the potential notice issue, the Division set the matter for hearing. The subsequent hearing before the Division in which DKD actively participated (as well as during the hearing on the application for review *de novo*) cured any defect in the notice.

8. Another notice issue addressed by the Division concerned notice to surface owners Felipe A. Moreno and Adelaida P. Moreno. It seems to be undisputed that these persons, owners of record of surface rights at the proposed injection site, were not notified of the application in this matter. However, subsequent to the hearing before the Division and prior to the hearing of this matter, those individuals conveyed their interest to Gandy Corporation. Through a letter agreement, Gandy Corporation and Pronghorn have become partners in the proposed disposal operation (along with Marks & Garner) and Gandy Corporation has agreed to the use of the property for purposes of saltwater disposal. It seems this transaction has cured any notice issue with respect to the surface owner.

[1] As the assignment does not bear the approval of the State Land Office, its validity is in doubt. *See* NMSA 1978, § 19-1-13 (Repl. 1994).

9. A final notice issue was obliquely raised by DKD concerning the extent of the perforations through which injection would be accomplished. Initially, notice was provided that injection would be accomplished through perforations located between 6,000 and 6,200 feet. Later, Pronghorn, after a conversation with a Division engineer, requested that it be permitted to inject from 6,000 to 6,400. It does not appear that this defect is material or that DKD was prejudiced by the change.

10. Thus, it appears that notice is not an issue in this matter and we can consider the merits of the application.

11. As noted, Pronghorn proposes to dispose of produced water into the San Andres and Glorieta formations. Pronghorn seeks to use the State "I" Well No. 2 (API No. 30-025-03735) for this purpose.

12. Rules 701 through 708 (19.15.9.701 through 19.15.9.708 NMAC) govern the injection of produced water into any formation. Injection wells must be equipped, operated, monitored and maintained in such a way as to assure mechanical integrity and prevent leaks and fluid movement adjacent to the well bore. *See* 19.15.9.703(A) NMAC. Furthermore, injection wells must be operated and maintained in such a way as to confine the injected fluids into the interval approved and prevent surface damage or pollution. *See* 19.15.9.703(B) NMAC. In no event may injection operations be permitted to endanger underground sources of drinking water (19.15.9.703(C) NMAC) and injection wells must undergo rigorous testing to serve these goals (19.15.9.704 NMAC).

13. Order No. SWD-836 appears to have addressed each of these points, and the parties have not raised any issue with respect to the conditions for injection set out in SWD-836. Administrative notice is taken of Order No. SWD-836 and the accompanying file.

14. Although not stated explicitly in the rules, injection operations must not cause waste or threaten correlative rights. Apparently to address this issue the parties focused their presentations on the potential productivity of the San Andres and Glorieta formations.

15. Pronghorn presented the testimony of a petroleum engineer who testified that he had studied production data, scout ticket data, production test data, log data and other data to reach conclusions concerning the proposed well. He testified that no well in the immediate vicinity of the proposed injection well produced oil or gas from either the San Andres or Glorieta formations in either Section 16 or Section 1. All 35 wells in those sections had penetrated both formations but produced oil and gas only from lower formations such as the Wolfcamp or the Pennsylvania-Strawn. Pronghorn's witness testified that data from electric logs indicated that the resistivity of formation water in the San Andres was 0.165 ohm and 0.86 ohm in the Glorieta; this data demonstrates that the water saturation of the basal San Andres and the upper Glorieta in the vicinity of the proposed injection well exceeds 94 percent. In the two primary zones of permeability, water saturations exceed 98% in the upper interval and 62% in the lower interval. Pronghorn's expert testified that even though some hydrocarbons are likely present in the

reservoir (a "show" of hydrocarbons was seen in the State "T" Well No. 2), the relative permeability of the rock and the water saturation make it extremely unlikely that any of the hydrocarbons could move to a well bore and be recovered. The witness further testified that the nearest production from either the San Andres or the Glorieta formations was six miles south of the proposed injection well.

16. DKD's witness testified it was his intent to drill a well to produce hydrocarbons from "shallow zones" but failed to identify any specific objective and failed to produce any evidence supporting its apparent assertion that either the San Andres or the Glorieta will produce oil or gas. The witness also testified concerning the potential harm that the proposed injection could cause to DKD's injection well, some 2,000 feet away, but Pronghorn's witness testified that the DKD well was using a zone for disposal that was several thousand feet below the proposed zone. Furthermore, Pronghorn's expert testified even after nine years of operation at 1,500 barrels per day, water would be swept from the well bore at most 1,320 feet south. Therefore, it is apparent that the proposed well does not pose a danger to DKD's operations or other operations in the vicinity.

17. It thus appears that the Glorieta and San Andres are wet and will not produce commercial quantities of oil or gas in the vicinity of the proposed injection well. It also appears that the proposed operation will not pose a physical threat to DKD's operations, since water will be swept at most 1,320 feet from the well in nine years. Nor does it appear that the proposed operation poses a hazard to other oil and gas operations in the vicinity.

18. DKD seems to claim that Pronghorn's application threatens its existing operations and its substantial investment in those operations and could result ultimately in a loss of approximately 35 to 40 percent of its total revenue. This claim cannot be addressed here; the Commission has no authority to regulate competition among commercial disposal operations.

19. Finally, DKD objects to the application of Pronghorn on legal grounds. DKD argues that a mineral right is necessary to operate the proposed injection well, but that Chesapeake owns the mineral interest and Pronghorn only owns a small surface parcel.[2] DKD argues that Chesapeake's letter stating it has no objection to the application or the issuance of an injection permit is irrelevant.

[2] DKD's argument that a mineral lease is necessary is undercut by its own operations. The assignment from Chesapeake to DKD on the property where DKD maintains its own injection operation appears not to be valid since it was not approved by the Commissioner of Public Lands pursuant to NMSA 1978, § 19-10-13. Thus, DKD appears not to possess a mineral lease for its injection operations either. *See* paragraph 7, above.

20. Pronghorn, citing Snyder Ranches Inc. v. Oil Conservation Commission et al., 110 N.M. 637, 798 P.2d 587 (S.Ct. 1990), seems to argue that subsurface trespass is a matter for the courts, not this body, and that the potential for subsurface trespass is essentially irrelevant in this proceeding.

21. It appears to be undisputed that Pronghorn controls a one-acre parcel at the site of the proposed disposal well. It also appears to be undisputed that Pronghorn does not own the relevant mineral interest underlying the one-acre disposal site; that is owned by Chesapeake, who holds an oil and gas lease granted by the State Land Office. It also seems to be undisputed that Chesapeake has acquiesced in writing to the disposal operation proposed by Pronghorn.

22. DKD's assertion that the right to inject water produced in connection with oil and gas exploration and production can be drawn from a mineral lease appears to be correct; the right to inject fluids is usually considered to be inherent in the mineral lessee as a part of the lessee's right to use so much of the land as is necessary to explore for and remove the oil and gas. DKD's apparent assertion that the typical oil and gas lease does not grant inherent rights to dispose of water that is produced from another lease, transported to the lease, and proposed for disposal also appears to be correct.

23. However, a surface owner like Pronghorn may also possess an independent right to permit injection into non-productive zones underlying the property. This right is theoretical and no conclusions should drawn in this case concerning it. An interesting discussion appears in the annals of the Rocky Mountain Mineral Law Institute. *See* Yoder & Owen, "Disposal of Produced Water," 37 Rocky Mountain Mineral Law Institute, § 21.02[2].

24. Snyder Ranches holds that a salt water disposal permit under Rule 701 (19.15.9.701 NMAC) is merely a license to inject and does not confer any specific property right on the holder. Thus, the issue of subsurface trespass is the responsibility of the operator, as correctly observed by Pronghorn. The Commission and the Division may in appropriate circumstances require an operator demonstrate that the operator has a good faith claim to operate the well or operation. *See e.g.* Application of TMBR/Sharp Drilling, Inc., Cases 12731 and 12744, paragraphs 27, 28 (Order No. R-11700-B):

> 27. When an application for permit to drill is filed, the Division does not determine whether an applicant can validly claim a real property interest in the property subject to the application, and therefore whether the applicant is "duly authorized" and "is in charge of the development of a lease or the operation of a producing property." The Division has no jurisdiction to determine the validity of any title, or the validity or continuation in force and effect of any oil and gas lease. Exclusive jurisdiction of such matters resides in the courts of the State of New Mexico. . . .

28. It is the responsibility of the operator filing an application for a permit to drill to do so under a good faith claim to title and a good faith belief that it is authorized to drill the well applied for.

25. However, in this matter, Pronghorn can make such a good faith claim. Pronghorn owns the property in the immediate vicinity of the proposed injection operation. Chesapeake, the mineral lessee, has indicated it has no objection to the proposed injection operation. Pronghorn has indicated its willingness to seek from the State Land Office a salt-water disposal easement (if required by the State Land Office). Given these undisputed facts, Pronghorn meets any reasonable criteria for issuance of a permit. If DKD believes that Pronghorn lacks the necessary title in this case, its recourse is in the courts of the State of New Mexico, not this forum. *Application of TMBR/Sharp Drilling, Inc., supra.*

26. The reason the permit to dispose of produced water exists in the first place is to ensure that formations potentially productive of oil or gas are protected from the injection operations and that sources of fresh water are also protected. As noted, SDW-836 appears to meet these objectives.

27. For the foregoing reasons, the application of Pronghorn herein should be approved.

IT IS THEREFORE ORDERED THAT:

1. The application of Pronghorn is granted and Order No. SWD-836 (granting Pronghorn Management Corporation a permit to utilize the State "1" Well No. 2 (API No. 30-025-03735) for injection of produced water) shall be and hereby is reinstated.

2. Jurisdiction of this matter is retained for the entry of such further orders as the Commission may deem necessary.

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

STATE OF NEW MEXICO
OIL CONSERVATION COMMISSION

JAMI BAILEY, MEMBER

ROBERT LEE, MEMBER

LORI WROTENBERY, CHAIR

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