THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

Before Commissioners:

Shari Feist Albrecht, Chair

Jay Scott Emler Dwight D. Keen

In the Matter of the Application of Midstates Energy)	Docket No: 18-CONS-3196-CUIO
Operating, LLC to authorize injection of saltwater)	
into the Squirrel formation at the Thrasher #10)	CONSERVATION DIVISION
enhanced recovery well, located in Section 25,)	
Township 13 South, Range 20 East, Douglas County,)	License No. 35503
Kansas.)	

ORDER ON MIDSTATES' APPLICATION

This matter comes before the State Corporation Commission of the State of Kansas (Commission). Having examined its files and records, and being fully advised in the premises, the Commission makes the following findings and conclusions:

BACKGROUND:

- 1. On October 12, 2017, Midstates Energy Operating, LLC (Midstates) filed an Application with the Commission seeking a permit to authorize the injection of saltwater into the Squirrel formation at the Thrasher #10 well, located in Section 25, Township 13 South, Range 20 East, Douglas County, Kansas. Midstates published notice of its Application in the Lawrence Daily Journal-World newspaper on October 26, 2017, providing a protest period of thirty (30) days.²
- 2. Between October 16, 2017, and December 19, 2017, numerous protests and requests for hearing were filed in this docket.³

¹ Midstates Energy Operating, LLC, Application for Injection Well, p. 1 (Oct. 12, 2017) (Application). Midstates' Application is part of an "Application to Amend Injection Permit," filed the same day, under Permit No. E-31965, whereby the Thrasher #10 well would be added as a repressuring well along with the Thrasher I-5 well on the same lease.

² Affidavit in Proof of Publication – Lawrence Daily Journal-World (Jan. 9, 2018).

³ See Order Designating Prehearing Officer and Setting Prehearing Conference, ¶ 2 (Feb. 6, 2018).

- 3. On February 6, 2018, the Commission issued its *Order Designating Prehearing Officer and Setting Prehearing Conference*, scheduling a Prehearing Conference for February 22, 2018.⁴ Due to inclement weather, the Prehearing Conference was rescheduled for, and held on, March 9, 2018.⁵
- 4. On March 20, 2018, Midstates filed a Motion to Dismiss Protests (Motion to Dismiss).
- 5. On March 21, 2018, Midstates filed a Motion for Order Requiring the Use of Prefiled Testimony in Lieu of Oral Examination.
- 6. On March 26, 2018, Commission Conservation Staff (Staff) filed its Response to Operator's Motion to Dismiss Protests & Operator's Motion to Require Use of Prefiled Testimony (Staff's Response).
- 7. On March 26, 2018, G.M. Zemansky filed a Motion Opposing Midstates' Motion to Dismiss (Zemansky Motion Opposing Dismissal).
- 8. On March 26, 2018, Candice Meiners filed a Motion to Deny Applicant's Motion to Dismiss Protests (Candice Meiners Motion). Karin Pagel-Meiners filed an identical Motion to Deny Applicant's Motion to Dismiss Protests (Karin Pagel-Meiners Motion) on April 5, 2018.
- 9. On March 26, 2018, Allison G. Kort of Kort Law Firm, LLC, entered her appearance as attorney of record for Judith L. Wells as Manager of Wells Partners, LP.⁶
- 10. On March 27, 2018, the Commission issued its *Order Setting Procedural Schedule,*Protective Order, and Discovery Order, setting an evidentiary hearing for June 26, 2018.⁷

⁴ Id. at Ordering Clause B. See Order Nunc Pro Tunc Correcting Order Designating Prehearing Officer and Setting Prehearing Conference, ¶ 2 (Mar. 1, 2018).

⁵ Prehearing Officer Order Rescheduling Prehearing Conference, ¶ 3 (Feb. 23, 2018).

⁶ Amended Entry of Appearance, p. 1 (Mar. 26, 2018).

⁷ Order Setting Procedural Schedule, Protective Order, and Discovery Order, ¶ 15 (Mar. 27, 2018).

- 11. On March 27, 2018, Jessica Skyfield, "on behalf of Kansas Water," filed a response to the Motion to Dismiss entitled Protestant's Response to Staff's Motion to Dismiss Protests (Skyfield Response).
- 12. On March 28, 2018, Susan Iversen filed a Motion Opposing Midstate's Motion to Dismiss and Responding to Staff's Response to Operator's Motion to Dismiss Protests (Iversen Motion Opposing Dismissal).
- 13. On March 29, 2018, Judith L. Wells filed a Response to Applicant's Motion to Dismiss Protests (Wells Response).
- 14. On March 29, 2018, Douglas County filed a Response in Opposition to Midstates Energy Operating, LLC's Motion to Dismiss Protests and Motion Requiring the Use of Prefiled Testimony in Lieu of Oral Examination (Douglas County Response).
- 15. On March 29, 2018, Marianne Carter and Scott Dixon filed a Countermotion to Midstates' Motion to Dismiss Protests (Countermotion).
- 16. On March 30, 2018, Victoria Goetz filed a Motion to Deny Applicant Midstates' Motion to Dismiss Protests (Goetz Motion Opposing Dismissal).
 - 17. On April 10, 2018, G.M. Zemansky filed Information Request No. 1.
- 18. On April 19, 2018, the Commission issued its *Order on Midstates' Motion to Dismiss Protests*, granting Midstates' Motion to Dismiss all protests filed in this docket except those filed by Douglas County, Kansas, James and Patricia Bondurant, and Judith L. Wells as Manager of Wells Partners, LP.⁸
 - 19. On April 23, 2018, the Bondurants filed Information Request No. 1.

⁸ Order on Midstates' Motion to Dismiss Protests, ¶ 40 (Apr. 19, 2018).

- 20. On April 24, 2018, Terry Ballou and R L Hilbun pre-filed direct testimony on behalf of Midstates.⁹
- 21. On April 25, 2018, G.M. Zemansky filed a Motion to Compel Midstates, asking the Commission to "compel MidStates to . . . provide accurate, complete, and substantial answers" to Dr. Zemansky's Information Request No. 1.¹⁰ Midstates subsequently moved to strike Dr. Zemansky's Motion to Compel.¹¹
- 22. On May 3, 2018, the Commission issued its *Order on Midstates' Motion for Order Requiring the Use of Prefiled Testimony in Lieu of Oral Examination*, reaffirming its holding that failure to pre-file testimony may restrict a party's right to testify and present evidence at the evidentiary hearing.¹²
- 23. On May 10, 2018, the Commission issued its *Order on Midstates' Motion to Strike Motion to Compel Filed by G.M. Zemansky, Ph.D.*, finding that "Midstates has no duty to respond to any discovery requests within Dr. Zemansky's Motion to Compel Midstates." ¹³
- 24. On May 14, 2018, the Bondurants filed a Motion to Compel Midstates and to Provide Additional Time for Direct Written Testimony.
 - 25. On May 15, 2018, Judith L. Wells pre-filed direct testimony. 14

⁹ Pre-Filed Direct Testimony of Terry Ballou (Apr. 24, 2018) (Ballou Direct); Pre-Filed Direct Testimony of R L Hilbun (Apr. 24, 2018) (Hilbun Direct).

¹⁰ Motion to Compel Midstates, p. 1 (Apr. 25, 2018).

¹¹ Motion to Strike Motion to Compel filed by G.M. Zemansky, Ph.D., p. 1 (Apr. 25, 2018).

¹² Order on Midstates' Motion for Order Requiring the Use of Prefiled Testimony in Lieu of Oral Examination, ¶ 12 (May 3, 2018).

¹³ Order on Midstates' Motion to Strike Motion to Compel Filed by G.M. Zemansky, Ph.D., Ordering Clause B (May 10, 2018).

¹⁴ Prefiled Testimony of Judith L. Wells (May 15, 2018) (Wells Direct).

- 26. On May 21, 2018, Midstates published notice of the June 26, 2018 evidentiary hearing in both the Lawrence Daily Journal-World newspaper¹⁵ and the Wichita Eagle newspaper.¹⁶
- 27. On May 25, 2018, Jerry Knobel and Rene Stucky pre-filed direct testimony on behalf of Staff.¹⁷
- 28. On May 31, 2018, Staff, counsel for Midstates, and the Bondurants held a Discovery Conference. ¹⁸ At the Discovery Conference, Midstates, the Bondurants and Staff agreed that: (1) Midstates would provide renewed responses to the Bondurants' Information Request No. 1; (2) the Bondurants would have until June 18, 2018, to pre-file direct testimony; (3) Midstates and Staff would waive pre-filed rebuttal testimony, but would be allowed to address new information at the evidentiary hearing; and (4) the June 26, 2018, evidentiary hearing would remain in place as scheduled. ¹⁹
 - 29. On June 12, 2018, Judith L. Wells pre-filed rebuttal testimony. 20
- 30. On June 18, 2018, James Bondurant and G.M. Zemansky pre-filed direct testimony in opposition to Midstates' Application.²¹
- 31. Pursuant to the Kansas Administrative Procedure Act (KAPA), an evidentiary hearing was held in this proceeding on June 26, 2018, in the First Floor Hearing Room at the

¹⁵ Affidavit in Proof of Publication (May 22, 2018).

¹⁶ Affidavit of Publication (June 4, 2018).

¹⁷ Pre-filed Testimony of Jerry Knobel (May 25, 2018) (Knobel Direct); Pre-filed Testimony of Rene Stucky (May 25, 2018) (Stucky Direct).

¹⁸ See Order Amending Procedural Schedule, ¶ 8 (June 7, 2018).

¹⁹ Order Amending Procedural Schedule, ¶ 13.

²⁰ Prefiled Rebuttal Testimony of Judith L. Wells Manager, Wells Partners, LLC, a Limited Agricultural Company and Owner of the NW Quarter of Section 25, Township 13S, Range 20E (June 12, 2018) (Wells Rebuttal).

²¹ Testimony of James Bondurant in Opposition to the Application of Midstates Energy's Application to Authorize Injection of Saltwater into the Squirrell Formation (June 18, 2018) (Bondurant Direct); Prefiled Testimony of G.M. Zemansky (June 18, 2018) (Zemansky Direct).

Commission's Topeka office.²² The Commission heard live testimony from a total of seven witnesses, two on behalf of Midstates, three on behalf of Protestants, and two on behalf of Staff.²³ The parties had the opportunity to cross-examine the witnesses, as well as redirect their own witnesses.

LEGAL STANDARDS:

- 32. K.A.R. 82-3-400(a) states that "[i]njection shall be permitted only after both of the following conditions are met: (1) The operator has filed an application for injection authority with the conservation division in accordance with K.A.R. 82-3-401 and provided notice in accordance with K.A.R. 82-3-402. (2) The conservation division has issued a written permit granting the application."
- 33. K.A.R. 82-3-401(a) lists the information an Operator must provide the Conservation Division on an injection well application, and K.A.R. 82-3-402 provides notice requirements for such an application.
- 34. K.A.R. 82-3-403 states the factors the Conservation Division must consider when issuing a permit authorizing injection.
- 35. K.A.R. 82-3-405 through 82-3-407 provide the requirements an applicant must meet for injection well casing and cement, tubing and packer, and mechanical integrity.

DISCUSSION:

36. The Commission has jurisdiction and authority to make and enforce rules, regulations and orders for the prevention of waste.²⁴ Indeed, "prevention of waste [is] of primary importance" in oil and gas conservation.²⁵ The Commission is also tasked with the protection of

²² Transcript, p. 1, lines 12-20 (June 26, 2018) (Tr.).

²³ Tr., p. 3, lines 2-23.

²⁴ K.S.A. 55-604(a)(2).

²⁵ Trees Oil Co. v. State Corp. Comm'n, 279 Kan. 209, 225 (2005).

fresh and usable water²⁶ and the protection of correlative rights.²⁷ In light of its duty to prevent waste and protect both correlative rights and fresh and usable water, the Commission requires an injection well applicant to furnish the Commission with certain information.²⁸

37. Both Mr. Bondurant and Dr. Zemansky alleged that Midstates' Application failed to provide information requested pursuant to K.A.R. 82-3-401(a).²⁹ Mr. Bondurant asserted that Staff "accepted an application from Midstates . . . that is incomplete and fails to provide material information including, but not limited to, the absence of the depth of the producing formation and the quantification of total dissolved solids in the producing formation."³⁰ In his closing argument at hearing, Mr. Bondurant asked the Commission to adopt the closing statement he made in Docket No. 18-CONS-3195-CUIC, wherein he stated that his "[b]iggest concern" is that public persons should be provided with injection well applications that are entirely complete so that such persons can become familiar with the relevant information.³¹

38. Dr. Zemansky alleged that "the quality of groundwater intercepted by any of the oil or water supply wells in Township 13S, Range 20E, Sections 25 or 36" is unknown.³² Dr. Zemansky alleged that Midstates' Application lacked a proper plat.³³ Dr. Zemansky further alleged that numerous other spaces on Midstates' Application were left blank.³⁴ Dr. Zemansky also questioned Staff's testimony regarding the depth of fresh and usable water,³⁵ as well as Midstates'

²⁶ K.A.R. 82-3-403(a). See K.S.A. 55-602; K.S.A. 55-704.

²⁷ K.S.A. 55-603.

²⁸ See K.A.R. 82-3-401(a).

²⁹ Bondurant Direct, p. 3, lines 8-11; Zemansky Direct, p. 7, line 2.

³⁰ Bondurant Direct, p. 3, lines 8-11.

³¹ Tr., p. 97, lines 2-7. See 18-CONS-3195-CUIC Hearing Transcript, p. 92, line 8 through p. 93, line 2 (June 26, 2018).

³² Zemansky Direct, p. 4, lines 6-8.

³³ Zemansky Direct, p. 5, lines 9-13.

³⁴ See Zemansky Direct, pp. 7-13 (e.g., no alleged information on well surface elevation, plug back depth, top of injection formation, strata depth, total dissolved solids, static fluid levels, elevation reference on an electric log, average daily rate of injection, and injection fluid; allegedly incomplete ACO-1 form).

³⁵ Zemansky Direct, p. 18, lines 13-20.

and Staff's testimony on induced seismicity.³⁶ Dr. Zemansky asserted that Midstates' Application should be rejected as incomplete, allegedly foreclosing the possibility of "a reasoned judgment that granting [the Application] will result in the protection of fresh and usable groundwaters."³⁷

- 39. Ms. Wells alleged concerning the Thrasher lease that the Commission has not properly enforced its regulations nor penalized the relevant Operators who have ostensibly failed to comply with those regulations.³⁸ She also claimed that injection rates/amounts in the vicinity of the Thrasher lease are far too high for enhanced recovery oil wells in proportion to the oil that is being produced, "by factors exceeding 100 to 1."³⁹ Indeed, she stated at hearing that she would be more open to approval if Midstates "lower[s] the injection rate to what is consistent with the leases in the area."⁴⁰
- 40. Ms. Wells asserted that approval of Midstates' Application might add to what she considers an already significant problem with abandoned wells in Kansas.⁴¹ She repeatedly referenced Midstates' statement about having "trucks waiting" in order to claim that Midstates might be planning to import wastewater from other leases.⁴² Moreover, she raised concerns about possible earthquakes⁴³ and water contamination.⁴⁴
- 41. In addition, Ms. Wells argued that Midstates' Application cannot be approved because it attempts to add the Thrasher #10 well to the Thrasher I-5 permit based on Midstates'

³⁶ Zemansky Direct, pp. 18-21.

³⁷ Zemansky Direct, p. 22, lines 6-8.

³⁸ See e.g. Wells Direct, p. 2, lines 13-16; p. 6, lines 5-10; p. 6, lines 22-25; p. 7, lines 1-12; p. 8, lines 24-25; p. 9, lines 1-4; p. 11, line 12; Wells Rebuttal, p. 2, lines 11-12; p. 3, lines 1-4; p. 7, lines 1-4, 14-18; p. 8, lines 16-18; p. 9, lines 22-23; p. 10, lines 1-2; p. 13, lines 6-17; p. 14, lines 1-5; p. 17, lines 4-5; p. 18, lines 8-19; p. 19, lines 10-12; p. 21, line 22.

³⁹ Wells Direct, p. 3, lines 9-13. *See e.g.* Wells Direct, p. 14, lines 6-14, 23-24; Wells Rebuttal, p. 3, lines 14-23; p. 4, lines 1-11; p. 5, lines 13-14; p. 10, lines 10-22; p. 12, lines 11-14; p. 15, lines 1-4; p. 21, lines 2-7.

⁴⁰ Tr., p. 57, lines 13-15.

⁴¹ See e.g. Wells Direct, p. 5, lines 7-13; Wells Rebuttal, p. 2, lines 16-17; p. 19, lines 13-22.

⁴² See Wells Direct, p. 13, lines 3-13; Wells Rebuttal, p. 4, line 13-20; p. 8, lines 2-3; p. 11, lines 19-21.

⁴³ See Wells Rebuttal, p. 11, lines 5-9; p. 12, lines 14-17.

⁴⁴ See e.g. Wells Direct, p. 3, lines 17-18; p. 8, lines 2-4; p. 15, lines 4-12; Wells Rebuttal, p. 12, line 15; p. 20, lines 5-9.

Application to Amend Injection Permit (Form U-8).⁴⁵ Ms. Wells argued that the "Thrasher I-5 (EOR) had its permit revoked March 9, 2016 and a new application was needed."⁴⁶ Ms. Wells continued: "Despite the revocation of the Thrasher I-5 injection permit . . . and the requirement for a new application, no application is on file for Thrasher I-5."⁴⁷ Instead, Ms. Wells noted that Mr. Stucky unilaterally restored the Thrasher I-5 permit without Commission approval.⁴⁸ According to Ms. Wells, the Thrasher I-5's revocation status means that "the Application to Amend the Injection Permit for I-5 received October 12, 2017 to add Thrasher #10 to the permit is invalid."⁴⁹

42. In support of the Application, Midstates' witness R L Hilbun stated that "Midstates['] Application seeks authority to inject water through the Thrasher #10 well into the Squirrel Formation through the present completion at a maximum volume of 100 barrels of water per day and at maximum injection pressure of 400 PSI."⁵⁰ Regarding containment of injection fluids to the Squirrel Formation, Mr. Hilbun testified:

The Well Completion Report for the subject well indicates that when the well was drilled the operator drilled down 44 feet, and set that length of seven inch surface casing, [and] cemented it to the surface. Then they drilled down to the total depth of 810 feet using 2.875" casing and cemented it to the surface. The casing was then perforated from 720' to 730' in the Squirrel formation which is the producing formation. After the well was completed a Mechanical Integrity Test ("MIT") was performed upon the well to ensure the integrity of the well construction. The subject well passed the MIT test with no issues. All freshwater strata above the Squirrel formation is protected by the surface and producing casing strings which are both cemented to the surface and also by the presence of a number of shale layers above the perforations. Thus, in my opinion the integrity of the completion for the subject well is sound and the integrity of the well construction is sufficient to confine the injected water to the Squirrel formation. 51

⁴⁵ Wells Direct, p. 7, lines 14-16. See Application to Amend Injection Permit (Form U-8), p. 1 (Oct. 12, 2017).

⁴⁶ Wells Direct, p. 6, lines 23-24.

⁴⁷ Wells Direct, p. 6, line 25 through p. 7, line 2.

⁴⁸ Wells Rebuttal, p. 13, lines 6-9.

⁴⁹ Wells Direct, p. 7, lines 15-16.

⁵⁰ Hilbun Direct, p. 4, lines 14-16.

⁵¹ Hilbun Direct, p. 6, lines 4-15.

- 43. Mr. Hilbun testified that the Thrasher I-5 well, which is roughly 669 feet west of the proposed Thrasher #10 well "has been in operation since 2014 . . . in precisely the same manner as the Thrasher #10 well is proposed to be operated and there have been no adverse effects attributable to such injection during that time. Thus, there is no reason that we cannot also conclude that the Thrasher #10 well will operate equally as safely and efficiently as the Thrasher I-5 has operated for the last four years."⁵²
- 45. Mr. Hilbun further testified that "[t]here has been no water brought in from other leases in this area for this operator," 59 that Midstates has no intention of bringing in water from

⁵² Hilbun Direct, p. 7, lines 2-10. See Ballou Direct, p. 3, lines 1-4; Tr., p. 11, line 16 through p. 12, line 12.

⁵³ Hilbun Direct, p. 7, line 16 through p. 8, line 3.

⁵⁴ See Tr., p. 27, line 23 through p. 28, line 9.

⁵⁵ Tr., p. 29, lines 2-6.

⁵⁶ Tr., p. 29, lines 6-9.

⁵⁷ Tr., p. 29, lines 14-18.

⁵⁸ Tr., p. 30, lines 2-9.

⁵⁹ Tr., p. 31, lines 15-16.

other leases, 60 and "[t]he injected water will consist of the produced water from . . . the wells that surround the injector and makeup water from the Rural Water System No. 4 there." 61

46. Regarding spill prevention, Mr. Hilbun stated that Midstates has "a spill prevention and control plan . . . for containment of any failure of service vessel and then a contingency . . . should the containment fail." Mr. Hilbun further agreed that "the storage of high volumes of produced water in preparation for that water being hauled away by truck" is more risky than "immediate injection of that water on site." Mr. Hilbun testified that the risk of potential water pollution is "very improbable."

47. Midstates' witness Terry Ballou testified that "[d]ue to the extremely thick and impermeable Hertha limestone formation present in this area the only way injection or formation fluid could migrate up and enter fresh and usable water strata would [be] through casing failure. However, well completion reports and Mechanical Integrity Tests performed on the subject well clearly demonstrate that there is no casing failure in the subject well." Mr. Ballou also testified that Midstates "would not be able to operate an effective water flood upon the Thrasher lease using injection pressures less than 400 psig, and a portion of the recoverable oil would be left unrecovered and waste will occur." Mr. Ballou also testified that the requested 100 bbls/day injection rate is necessary for this water flood and is "consistent with other operations in the area and also with the rates and pressures approved by the Commission for other injection wells in the area."

⁶⁰ Tr., p. 31, lines 17-20.

⁶¹ Tr., p. 31, line 24 through p. 32, line 1.

⁶² Tr., p. 32, lines 6-14.

⁶³ Tr., p. 33, lines 3-10.

⁶⁴ Tr. p. 45, lines 3-8.

⁶⁵ Ballou Direct, p. 4, lines 16-20.

⁶⁶ Ballou Direct, p. 5, lines 5-7.

⁶⁷ Ballou Direct, p. 5, lines 7-13. See Ballou Direct, p. 7, lines 13-14 (stating that "the injection rates and pressures being sought in this Docket <u>are incredibly minimal in the context of oil and gas development"</u> (emphasis added)).

- 48. At the hearing, Mr. Ballou disagreed with the claim that the Commission must consider the cumulative effect of all injection in the area, largely because there are "dry lines in between" the wells in the Squirrel Sandstone, "[a]nd so, therefore, they will not communicate. And I have not seen them communicate from one to the other." Regarding injection volumes, Mr. Ballou testified that if an operator injects higher volumes of water into a well, the water simply channels to a producing well where it will flow out or can be pumped out. Thus, according to Mr. Ballou, there is no risk to fresh water resources because "[y]ou're pumping the fluid right out of the hole."
- 49. Regarding notice of Midstates' Application,⁷¹ Mr. Knobel testified that Midstates "published notice on October 26, 2017, in the proper county newspaper and listed the proper 30-day protest period."⁷² Moreover, Mr. Knobel testified that the "surrounding parties within a one-half mile radius of subject well" were served with the Application,⁷³ and minor discrepancies in the location of the Thrasher #10 well "did not affect one-half mile notice requirements."⁷⁴
- 50. Based on his review of both surface and production casing cemented to surface, Mr. Knobel stated that the subject well "is properly constructed and fresh water zones are protected." Mr. Knobel testified that the confining layers between the deepest known fresh water in the area and the top of the Squirrel Sand oil producing zone "will adequately contain" any injection water that might happen to migrate from the subject well. Further, according to Mr. Knobel, the surface casing on the subject well meets Commission standards, and the production

⁶⁸ Tr., p. 12, lines 13-24.

⁶⁹ Tr., p. 14, lines 16-24.

⁷⁰ Tr., p. 25, line 25 through p. 26, line 15.

⁷¹ See K.A.R. 82-3-402.

⁷² Knobel Direct, p. 5, lines 14-15. See Affidavit in Proof of Publication (Jan. 9, 2018).

⁷³ Knobel Direct, p. 5, lines 16-17.

⁷⁴ Knobel Direct, p. 5, lines 17-20.

⁷⁵ Knobel Direct, p. 3, lines 11-19.

⁷⁶ Knobel Direct, p. 3, line 21 (corrected by Tr., p. 65, lines 10-11) through p. 4, line 4.

casing was properly set and circulated to surface.⁷⁷ Therefore, he concluded that "[t]he injection zone is adequately isolated and in compliance with KCC regulations."⁷⁸

- Moreover, Mr. Knobel "conducted an Area of Review ("AOR") to check for possible environmental concerns due to nearby wells," stating that "[b]oth the Thrasher #10 and #I-5 wells are cemented from approximately 800 feet to surface. Cemented production casing and surface casing in the two Thrasher wells will protect all potential fresh water zones." Regarding the requested rate and pressure for the subject wells, Mr. Knobel testified that "[t]he requested rate of 100 barrels of water per day at a pressure of 400 pounds per square inch is consistent with the rate and pressure that is being used in the surrounding area for this formation." Mr. Ballou agreed with Mr. Knobel's assessment on rate and pressure.
- 52. Although none of the Commission's underground injection well permitting factors pertain to induced seismicity, Mr. Stucky testified that "[t]he Conservation Division has been very active in working on this problem with Kansas Geological Survey, Kansas Department of Health and Environment, and various Oklahoma agencies." Mr. Stucky testified that induced seismicity concerns have been concentrated mainly in Harper and Sumner Counties on Kansas' southern border where significant volumes of saltwater have been disposed. Mr. Stucky stated that, in contrast to the activity in Kansas' southern counties, Midstates' Application "does not contain any

⁷⁷ Knobel Direct, p. 4, lines 6-10.

⁷⁸ Knobel Direct, p. 4, lines 10-11.

⁷⁹ See Knobel Direct, p. 4, lines 12-13; Ballou Direct, p. 4, lines 18-20; Hilbun Direct, p. 6, lines 8-10.

⁸⁰ Knobel Direct, p. 4, line 14 through p. 5, line 12.

⁸¹ Knobel Direct, p. 5, lines 9-12.

⁸² Knobel Direct, p. 6, lines 4-6.

⁸³ Ballou Direct, p. 4, lines 13-14.

⁸⁴ Stucky Direct, p. 3, lines 8-10.

⁸⁵ Stucky Direct, p. 3, lines 15-24.

factors implicated in recent studies regarding induced seismicity in or near Kansas."⁸⁶ Mr. Stucky concluded:

This application is for injecting a maximum of 100 barrels of water per day back into the formation from which it came, the idea being to maintain the pressure in the reservoir to keep the oil moving into the producing wellbores. Pre-injection pore pressure is likely to rarely be surpassed. As Rex Buchanan et al. of the Kansas Geological Survey state in their Public Information Circular 36, Revised in August 2015 (Exhibit A), earthquakes are much more likely to be associated with disposal wells drilled into deep formations than those used for enhanced oil recovery. Therefore, there are some significant differences between [Midstates'] application and situations in Kansas suspected of being linked to induced seismicity.⁸⁷

- Regarding Ms. Well's concerns about abandoned wells, Mr. Stucky agreed that the 2018 abandoned well list contains nearly 22,000 abandoned oil wells, however, he testified that only 5,579 of those wells require action. Regarding U3-C Annual Reports of injections, Mr. Stucky stated that "the current Operator filed their U3-C for 2018, showing that the Thrasher #I-5 had 0 barrels injected in 2017." However, Mr. Stucky also testified that the Thrasher #10 Application "really has no bearing on the I-5."
- 54. Mr. Stucky disagreed with Ms. Wells' allegation that the high water injection to oil production ratio anticipated for the Thrasher #10 well means that the well will be used for a disposal well instead of an enhanced recovery well.⁹¹ Rather, he asserted "[t]here is no mention of an oil to water ratio as a requirement for enhanced oil recovery wells in Commission regulations."⁹² Indeed, Mr. Stucky went further when questioned at hearing regarding injection ratios of water to oil, stating that injected water is "being confined in that reservoir, so it really has no bearing on

⁸⁶ Stucky Direct, p. 3, lines 27-28.

⁸⁷ Stucky Direct, p. 3, line 29 through p. 4, line 6.

⁸⁸ Stucky Direct, p. 4, lines 7-15.

⁸⁹ Stucky Direct, p. 5, lines 6-8.

⁹⁰ Tr., p. 68, lines 23-25.

⁹¹ Stucky Direct, p. 5, lines 9-13.

⁹² Stucky Direct, p. 5, lines 13-14.

usable or fresh water,"⁹³ and "[a]s far as protection of fresh and usable water, it's also been stated that an EOR is just kind of a recirculation thing. So no matter what the volume or frequency of the recirculation, really it's going to have no effect on the fresh and usable water."⁹⁴ Mr. Stucky concluded that "the ratio of oil, the production of oil versus the production of water for any well or any lease" is not relevant to the Conservation Division's missions to protect fresh water resources, protect correlative rights and prevent waste.⁹⁵

- 55. Mr. Stucky disagreed with Ms. Well's contention that Douglas County is an importer of wastewater because, "[a]s has been testified by the Applicant, . . . no additional water outside of the fresh rural water is being added to that." 96
- 56. Mr. Knobel recommended that "KCC District Staff should do a lease inspection of the Hadl [#2] well to perform a cement verification. Once this is verified, KCC may proceed to issue an injection permit for the Thrasher #10 well."⁹⁷
- 57. Mr. Stucky affirmed that he has no concerns about the mechanical integrity of the subject well, 98 no concerns that the subject wells will pollute water resources, 99 and no concerns about violation of correlative rights. 100 Regarding incomplete information on injection applications, Mr. Stucky testified that Staff conducts its own research, verifies information, and/or contacts the applicant for further information. 101 In addition, Mr. Stucky stated that "some of the

⁹³ Tr., p. 76, lines 14-15.

⁹⁴ Tr., p. 78, lines 5-9.

⁹⁵ See Tr., p. 90, lines 1-11.

⁹⁶ Tr., p. 70, lines 2-7.

⁹⁷ Knobel Direct, p. 6, lines 10-12; Tr., p. 65, line 12 (correcting page 6, line 10 of Mr. Knobel's direct testimony from "Hadl #1" to "Hadl #2").

⁹⁸ Tr., p. 70, lines 11-13.

⁹⁹ Tr., p. 70, lines 20-22.

¹⁰⁰ Tr., p. 70, lines 17-19.

¹⁰¹ Tr., p. 67, line 22 through p. 68, line 3.

information the applicant probably doesn't have \dots [a]nd even if they put it on, we are going to go by what we have." 102

sell and the lack of a new application for such well invalidates Midstates' Application in this docket, Mr. Stucky explained that "[t]he Thrasher I-5 would be considered a pilot well which was the initial well," to which the application for the Thrasher #10 can be added, "[a]nd then they basically do a complete form for that I-10." Mr. Stucky also agreed that "when application is made to add an additional injection well to a previous docket, . . . the same people receive notice that would have received notice had it been a new docket." Moreover, Mr. Stucky stated: "If you're adding to the docket, there is actually one separate [sic] which is just the one page, front and back, saying you are adding it to this existing docket. And for that new well, you are filling out a complete form just like you do if it's the first well on the lease." In other words, "if the I-10 had been submitted as a brand new application, all of the same people would have received notice who did receive it in this docket; and all of the information supplied would have been supplied in that instance with the only addition of the U-8, which was provided in this docket would not have been required." 106

59. Mr. Stucky testified that he reinstated the Thrasher I-5 permit unilaterally because of a coding error, and asserted that he would not have reinstated the permit if he had known it was a Commission order. However, Mr. Stucky also testified that he did not retract his unilateral reinstatement because he "felt like there was no harm in seeing how the application [i.e., for the

¹⁰² Tr., p. 88, lines 15-16, 22-23.

¹⁰³ See Tr., p. 68, lines 18-24.

¹⁰⁴ Tr., p. 71, lines 4-8.

¹⁰⁵ Tr., p. 71, lines 13-17.

¹⁰⁶ Tr., p. 71, lines 19-25.

¹⁰⁷ Tr., p. 73, lines 8-10.

Thrasher #10] had already been made and added to the docket."¹⁰⁸ Mr. Stucky argued that "as a general rule I usually go ahead and revoke the permit and request a new application. When I looked at this one [i.e., the Thrasher I-5], basically . . . the original application was only a couple years old. AOR was still the same, and it was under a current MIT. So not realizing that it had been revoked under Commission order, I just went ahead and reinstated it."¹⁰⁹

FINDINGS AND CONCLUSIONS:

- 60. The Commission finds that the record in this proceeding, as explained above, provides substantial competent evidence that the Thrasher #10 well meets the Commission's permitting factors, well construction requirements, mechanical integrity test requirements, and notice requirements, pursuant to K.A.R. 82-3-400 *et seq*. The Protestants in this matter have had the opportunity to file testimony and other pleadings, as well as testify and cross-examine witnesses at an evidentiary hearing. Having done so, the Commission finds the Protestants have not refuted the evidence that approval of Midstates' Application will prevent waste, protect correlative rights, and protect fresh and usable water.
- 61. The Commission finds that the lack of a notation or answer on every line or blank in Midstates' Application does not provide a basis for denial. Indeed, this would not be a basis for denial in *any* particular case. The injection well application forms anticipate a wide range of facts and circumstances regarding individual wells, and therefore, it is improbable and most unlikely that every line of the form would need a response for the application to be complete. As Mr. Stucky testified in Docket No. 18-CONS-3195-CUIC, answers to some questions on an application would not provide relevant information to aid Staff is its review. Further, Staff verifies all necessary

¹⁰⁸ Tr., p. 74, lines 5-7.

¹⁰⁹ Tr., p. 69, lines 20-25.

¹¹⁰ Docket No. 18-CONS-3195-CUIC, Hearing Transcript, p. 88, line 20 through p. 89, line 1 (June 26, 2018). *See* Tr., p. 9, lines 23-24 (taking administrative notice of Docket No. 18-CONS-3195-CUIC).

information by its own independent research.¹¹¹ In addition, "material information"¹¹² pertaining to the adequacy and safety of the subject well is available to the public through the record of extensive pre-filed and hearing testimony in this proceeding. The Commission has the authority to determine whether an application is properly complete, ¹¹³ and reasoned judgment does not require the Commission to put form over substance when reviewing applications.¹¹⁴ Based upon its review of the record as a whole, the Commission finds there is substantial, competent evidence that approval of Midstates' Application comports with the Commission's duty to prevent waste, protect correlative rights and protect fresh and usable water.

62. The Protestant witnesses, Dr. Zemansky, Mr. Bondurant and Ms. Wells, provided no evidence of any danger the subject wells might pose to water supplies, nor did they provide any testimony on alleged structural unreliability or lack of integrity of the subject wells. Ms. Wells' concerns about the ratio of water injected to oil produced are speculative and were ably refuted by the expert opinions of Mr. Ballou¹¹⁵ and Mr. Stucky. ¹¹⁶ Ms. Wells' assertions regarding abandoned wells and the Commission's alleged lack of enforcement of its own regulations do not demonstrate any causal connection or nexus with the regulatory requirements for the safety and integrity of the subject well in this particular case. Moreover, Ms. Wells' repeated references to Midstates' "trucks waiting" are wholly speculative in nature and therefore irrelevant to the Commission's

¹¹¹ Tr., p. 67, line 22 through p. 68, line 1.

¹¹² See Bondurant Direct, p. 3, line 19.

¹¹³ See K.S.A. 74-623. See also K.S.A. 55-901(a) (providing that the owner or operator of an oil well that produces salt water or mineral waters may return such waters to certain horizons "if the owner or operator of such well makes a written application to the state corporation commission for authority to do so, and written approval has been granted to the owner or operator after investigation by the state corporation commission") (emphasis added); K.A.R. 82-3-401(a) (noting that the Commission approves the form on which an application is filed).

¹¹⁴ See e.g. Craig v. FedEx Ground Package Sys., Inc., 300 Kan. 788, 806 (2014) (stating the principle that "form should not be elevated over substance").

¹¹⁵ See Tr., p. 12, lines 19-24.

¹¹⁶ See Tr., p. 78, lines 5-9.

determination. Thus, the Commission finds there is no basis for denial of Midstates' Application on these points.

- 63. The Commission also finds the Protestants have not provided evidence that the subject wells present an unreasonable or increased risk of inducing earthquakes. Dr. Zemansky's testimony on induced seismicity and injection well fluid amounts constitutes speculative generalization regarding earthquake causation, which provides no evidence that Midstates' proposed well is likely to induce earthquakes. Simply pointing out the possible causes of induced seismicity in general does not demonstrate that the Thrasher #10 will present an unreasonable or increased risk of such seismicity. Ms. Wells only added a general statement of concern on this point. The Commission finds that unless there is demonstrable historical, statistical or seismological evidence of a causal link showing that injection wells in Douglas County, at the rate and pressure requested by Midstates, will cause movement of faults underlying Douglas County, Dr. Zemansky's and Ms. Wells' general concerns about induced seismicity do not provide a basis for denial of Midstates' Application.
- Application must *necessarily* be denied because the Thrasher I-5 permit was revoked. The evidence demonstrates that the Thrasher #10 Application practically functions as a complete and original application, ¹¹⁷ able to stand on its own merits, and thus, the Commission has evaluated it as such. There is no need for an overly formalistic captivity to Staff's Form U-8 permit number, which is essentially just used for administrative ease. However, the Commission agrees that the Thrasher I-5 permit was not properly reinstated and cannot remain in its current status unaddressed. The Commission finds it reasonable to grant Midstates an opportunity to cure the defect in the

¹¹⁷ See Tr., p. 71, lines 13-25.

Thrasher I-5 permit. Toward that end, the Commission finds that Staff shall investigate the Thrasher I-5 permit and file a Report and Recommendation to the Commission in this docket within 60 days of service of this Order.

CONCLUSION:

65. The Commission finds that Midstates' Application fulfills the requirements of Kansas law. The Protestants have failed to make a reasonable and supported case for denying Midstates' Application based on any possibility of waste, any risk of induced seismicity, or any threat to the protection of correlative rights and fresh and usable water. Therefore, the Commission approves Midstates' Application with a 100 barrels per-day maximum injection rate and a 400 psig maximum injection pressure for the Thrasher #10 well. The Commission also directs Staff to investigate and report to the Commission on the Thrasher I-5 permit, such that Midstates might cure the issues therein.

THEREFORE, THE COMMISSION ORDERS:

- A. Midstates' Application for injection authority at its Thrasher #10 well, with a maximum injection rate of 100 barrels per-day and a maximum injection pressure of 400 psig, is approved. Staff is directed to take any final steps necessary to process Midstates' Application administratively.
- B. Regarding the Thrasher I-5 well permit, Staff is directed to investigate the permit and file a Report and Recommendation to the Commission in this docket within 60 days of service of this Order.
- C. Any party may file and serve a petition for reconsideration pursuant to the requirements and time limits established by K.S.A. 77-529(a)(1).¹¹⁸

¹¹⁸ K.S.A. 55-162; K.S.A. 55-606; K.S.A. 55-707; K.S.A. 77-503(c); K.S.A. 77-531(b).

D. The Commission retains jurisdiction over the subject matter and parties for the purpose of entering such further orders as it deems necessary.

BY THE COMMISSION IT IS SO ORDERED.

MJD

Albrecht, Chai	r; Emler, Commiss	ioner; Keen, Commissioner
Dated:	8/16/2018	Lynn M. Rot
	Lynn M. Retz	
		Secretary to the Commission
Mailed Date: _	08/17/2018	

CERTIFICATE OF SERVICE

I, the undersigned, certify that the true copy of the a	NS-3196-CUIC attached Order has been served to the following parties by means of 1/2018
KEITH A. BROCK, ATTORNEY ANDERSON & BYRD, L.L.P. 216 S HICKORY PO BOX 17 OTTAWA, KS 66067 Fax: 785-242-1279 kbrock@andersonbyrd.com	JAMES BONDURANT AND PATRICIA BONDURANT 1028 E 1901 Road Eudora, KS 66025
JUDITH WELLS 3317 W. 68th St. Mission Hills, KS 66208 judithlouisewells@gmail.com	MICHAEL DUENES, ASSISTANT GENERAL COUNSEL KANSAS CORPORATION COMMISSION 1500 SW ARROWHEAD RD TOPEKA, KS 66604 Fax: 785-271-3354 m.duenes@kcc.ks.gov
LAUREN WRIGHT, LITIGATION COUNSEL KANSAS CORPORATION COMMISSION Conservation Division 266 N. Main St. Ste. 220 WICHITA, KS 67202-1513 Fax: 316-337-6211 l.wright@kcc.ks.gov	ALLISON G. KORT Kort Law Firm, LLC 204 W. Linwood Blvd. Kansas City, MO 64111 allison.kort@kortlawfirm.com
JOHN T. BULLOCK STEVENS & BRAND, LLP P.O. Box 189 Lawrence, KS 66044 jbullock@stevensbrand.com	BRADLEY R. FINKELDEI STEVENS & BRAND, LLP P.O. Box 189 Lawrence, KS 66044 bfinkeldei@stevensbrand.com

/S/ DeeAnn Shupe

DeeAnn Shupe