

**BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS**

In the Matter of the Application of)	Docket No. 19-CONS-3266-CUIC
ORCA OPERATING COMPANY, LLC)	
for a Permit to Authorize the Disposal of)	KCC License No. 34358
Produced Water into the Shoffner SWD 12-1)	
Well Located in Reno County, KS)	CONSERVATION DIVISION
_____)	

POST-HEARING BRIEF OF ORCA OPERATING COMPANY, LLC

Orca Operating Company, LLC ("Orca Operating") submits the following Post-Hearing Brief in support of its Application in the above captioned docket.

The sole issue in this docket is whether to approve Orca Operating's application to dispose of produced water in the Shoffner SWD 12-1 well in Section 12-25S-9W, Reno County, Kansas (the "Shoffner SWD"). In deciding that issue, the **only** relevant considerations are (A) whether the wellbore design of the Shoffner SWD complies with the applicable Commission regulations; (B) analysis of the permitting factors that are enumerated in K.A.R. § 82-3-403; and (C) whether granting the Application is consistent with the Commission's statutory duties to prevent waste, protect fresh and usable water, and protect correlative rights. The uncontroverted evidence in this docket overwhelmingly supports granting the Application.

What is **not** at issue in this docket is whether or not the Shoffner well is, or is not, within a floodplain and, if so, whether Orca Operating has complied with the rules or regulations of Reno County or the Kansas Department of Agriculture relating to floodplain development. The Commission has already approved Orca Operating's notice of intent to drill the Shoffner SWD at its present location and, insofar as the Commission is concerned, that well can be drilled at that

location.¹ The Commission does not have authority to enforce the rules or regulations of Reno County and the Kansas Department of Agriculture. Orca Operating is responsible for compliance with those rules and regulations, and will comply with all applicable ordinances and regulations in connection with the Shoffner SWD. Insofar as the Commission's regulations are concerned, the evidence is uncontroverted that the Shoffner SWD complies with all of those regulations and is consistent with the Commission's statutory duties, and that is all that the Commission is asked to decide.

The evidence in the record overwhelmingly supports granting the Application and approving Orca's right to inject produced water in the Shoffner SWD as requested in the Application.

- Orca Operating witness Jason Andrews ("Mr. Andrews") described in detail the proposed design of the wellbore of the Shoffner SWD and how it will adequately protect the fresh and usable water zones from the injected fluids with 3 layers of cement, 4 layers of steel tubing and casing, and a packer set above the injection zone.²
- Staff witness Todd Bryant ("Mr. Bryant") testified that the well design for the Shoffner SWD complies with all of the well construction requirements in the applicable Commission regulations.³
- Orca Operating witness Wayne Taylor ("Mr. Taylor") explained why Orca Operating had requested a maximum disposal volume of 10,000 barrels per day

¹ The Commission can take administrative notice of the approved KCC Form C-1 for the Shoffner SWD, KOLAR Document ID: 14276882 (approved January 11, 2019).

² Pre-Filed Direct Testimony of Jason Andrews ("Andrews Direct Testimony"), p. 3, line 1 – p. 4, line 11, Andrews Exhibit A.

³ Pre-Filed Testimony of Todd Bryant ("Bryant Direct Testimony"), p. 3, line 5 – p. 3, line 11, p. 3, line 19 – p. 4, line 17.

and that maximum disposal volume would be adequate.⁴ Mr. Andrews testified that, at a maximum permitted injection pressure of 250 psig, the pressure at the Arbuckle formation was comfortably below a pressure that might induce fracturing of the Arbuckle formation.⁵ Mr. Bryant also testified that the requested injection rate (10,000 barrels per day) and pressure (250 psig) are consistent with or below the rates and pressures that are being used in the surrounding area for disposal in the Arbuckle formation and that, in his opinion, at that rate and pressure there will be no threat to fresh water resources and oil and gas producing formations in the area.⁶

- There are no other wells within a ¼-mile radius of the Shoffner SWD.⁷
- There are two plugged wells within a ½-mile radius of the Shoffner SWD – the Griggs Oil #1-13 and #1 Hayes.⁸ Staff witness Rene Stucky ("Mr. Stucky") testified that those wells are probably outside the area of influence.⁹ Mr. Andrews and Mr. Stucky testified that both of those wells were plugged and that their plugging was approved by the Commission.¹⁰ The Griggs well was not drilled to the Arbuckle (which is the targeted reservoir for the injection) and, as a result, that well could not serve as a conduit for injected water.¹¹ Mr. Stucky testified that the drilling mud in #1 Hayes would adequately prevent the migration of injected fluid in that wellbore.¹²

⁴ Pre-Filed Testimony of Wayne K. Taylor ("Taylor Direct Testimony"), p. 2, line 24 – p. 3, line 9.

⁵ Andrews Direct Testimony, p. 6, line 13 – p. 7, line 4.

⁶ Bryant Direct Testimony, p. 6, line 8 – line 20.

⁷ Bryant Direct Testimony, p. 5, line 13 – line 18.

⁸ Prefiled Testimony of Rene Stucky ("Stucky Direct Testimony"), p. 4, line 19 – p. 5, line 8; Andrews Direct Testimony, p. 5, line 19 – p. 6, line 12..

⁹ Stucky Direct Testimony, p. 4, line 19 – line 22.

¹⁰ Andrews Direct Testimony, p. 5, line 19 – p. 6, line 12; Stucky Testimony, p. 5, line 2 – line 8.

¹¹ Andrews Direct Testimony, p. 6, line 4 – line 8.

¹² Stucky Direct Testimony, p. 5, line 3 – line 8.

- Mr. Bryant testified that there are two active water wells are located on the adjacent land owned by Adam and Jessica Pickett ("Protestants"), and that each of those wells was drilled to a depth of only 40'. Those water wells are 1,650' feet away from the Shoffner SWD.¹³ Mr. Andrews and Mr. Bryant testified that the Shoffner SWD will have conductor pipe set and cemented at to a depth of 125', surface casing set and cemented to 1,650', production casing set and cemented to 3,550', tubing from TD to surface, and a packer located above the injection zone, and all of that is more than adequate to isolate and protect the fresh water zones in Protestants' water wells.¹⁴
- Mr. Andrews testified that there are numerous confining zones between the injection interval and the base of the deepest fresh and usable water, including the salt section that acts a permeability barrier to fluid.¹⁵ Moreover, in his expert opinion, Mr. Andrews testified that the water injected into the Arbuckle formation cannot migrate upward more than 4,000' and contaminate the fresh and usable water zones.¹⁶ First, the wellbore design (i.e., the cement, casing, tubing and packer) will prevent migration during injection. Second, there is 4,170' of impermeable rock between the Arbuckle and the base of the fresh usable water. Third, there is 550' of impermeable salt section below the fresh usable water. All of that is a more than adequate to protect fresh usable water zones from the injected fluids.¹⁷

¹³ Bryant Direct Testimony, p. 5, line 19 – line 20.

¹⁴ Bryant Direct Testimony, p. 5, line 21 – p. 6, line 2; Andrews Testimony, p. 3, line 15 – p. 4, line 18; Andrews Exhibit A.

¹⁵ Andrews Direct Testimony, p. 4, line 12 – p. 5, line 10.

¹⁶ Id.

¹⁷ Id.

Both of Staff's witnesses – Mr. Bryant and Mr. Stucky – reviewed the Application filed by Orca Operating, reviewed the prefiled testimony of Mr. Taylor and Mr. Andrews in support of that Application, and performed their own review and analysis of the permitting factors in the Commission's regulations. Based on all of that information, both of Staff's witnesses testified that, in their expert opinions, the Shoffner SWD complies with all applicable rules and regulations of the Commission and both recommended, without qualification, that the Application be granted.¹⁸

Moreover, Mr. Stucky reviewed each of the objections and concerns expressed by the Protestants in their prefiled testimony – including surface spills, the fact that the Shoffner SWD is located in a sensitive groundwater area, and the possibility of induced seismicity. Based on that review, Mr. Stucky testified that he found no basis for concern or for denying the Application.¹⁹

Protestants' opposition to Application centered on their fear of surface spills and runoff of spilled fluids. Protestants' fears, however, are without justification. Specifically, the surface facilities for the Shoffner SWD, as explained by Mr. Taylor and Mr. Andrews, will eliminate the risk of a significant spill and the migration of that spill beyond the wellsite. Mr. Taylor testified that the tanks will be surrounded by a 2' high dike that is capable of retaining the entire volume of fluids in the tanks.²⁰ The dike area will be lined and will contain a sump pump that will pump fluids into the disposal system.²¹ Moreover, there will be a "kill switch" that shuts off the well in the event of a spill.²² Also, Orca Operating will have a comprehensive spill prevention plan will

¹⁸ Bryant Direct Testimony, p. 6, line 21 – p. 7, line 13; Stucky Direct Testimony, p. 7, line 6 – p. 8, line 4.

¹⁹ Stucky Direct Testimony, p. 3, line 15 – p. 7, line 5.

²⁰ Taylor Direct Testimony, p. 4, line 8 – line 12; p. 5, line 6 – line 19.

²¹ Id.; Pre-Filed Rebuttal Testimony of Jason Andrews, p. 4, line 20 – p. 5, line 6 ("Andrews Rebuttal Testimony")

²² Andrews Rebuttal Testimony, p. 5, line 1 – line 3.

be in place for the well pad.²³ All in all, Orca Operating is taking reasonable precautions to prevent spills and to mitigate and eliminate the effects of any spills that do occur.

Finally, the unanimous uncontroverted testimony of the experts was that granting the Application will prevent waste, will not jeopardize the integrity of fresh and usable water, and will not harm correlative rights.²⁴ The Shoffner SWD will be used to dispose of produced water from horizontal well(s) to be drilled by Orca Operating and, if the Application is not approved, those wells will not be drilled which will result in underground and economic waste.²⁵ The injection of produced water into the Shoffner SWD will not pose a threat to fresh and usable water.²⁶ Moreover, there is neither any contention by Protestants nor proof that granting the application will jeopardize correlative rights.²⁷ In fact, granting the Application will allow Orca Operating to protect the correlative rights of its mineral owners.²⁸

In conclusion, the Shoffner SWD complies with all applicable Commission rules and regulations, all of the relevant permitting factors in K.A.R. § 82-3-403 weigh in favor of granting the Application, and granting the Application is consistent with and furthers the Commission's statutory duties to prevent waste, protect fresh and usable water, and protect correlative rights. For those reasons, the Application should be granted without delay.

/s/ David E. Bengtson

David E. Bengtson (#12184)

STINSON LLP

1625 N. Waterfront Parkway, Suite 300

Wichita, Kansas 67206-6620

(316) 265-8800 / (FAX) 265-1349

Attorneys for Applicant Orca Operating Company, LLC

²³ Andrews Rebuttal Testimony, p. 5, line 19 – p. 6, line 11; Andrews Exhibit B.

²⁴ Bryant Direct Testimony, p. 6, line 21 – p. 7, line 8; Stucky Direct Testimony, p. 7, line 6 – p. 7, line 20.

²⁵ Taylor Direct Testimony, p. 2, line 11 – line 23; Andrews Direct Testimony, p. 2, line 12 – line 23 & p. 7, line 10 – line 16.

²⁶ Bryant Direct Testimony, p. 7, line 5 – line 8; Stucky Direct Testimony, p. 7, line 17 – line 20; Taylor Direct Testimony, p. 3, line 24 – p. 4, line 7; Andrews Direct Testimony, p. 7, line 5 – line 9.

²⁷ Bryant Direct Testimony, p. 7, line 1 – line 4; Stucky Direct Testimony, p. 7, line 9 – line 12.

²⁸ Andrews Rebuttal Testimony, p. 1, line 21 – p. 2, line 11.

VERIFICATION

STATE OF KANSAS)
) ss:
COUNTY OF SEDGWICK)

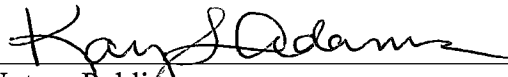
David E. Bengtson, of lawful age, being first duly sworn upon oath states:

That he is the attorney for the Applicant named in the foregoing Post-Hearing Brief and is duly authorized to make this verification; that he has read the foregoing Post-Hearing Brief and knows the contents thereof and that the facts set forth therein are true and correct to the best of his information and belief.



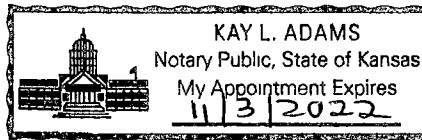
David E. Bengtson

SUBSCRIBED AND SWORN to before me this 2nd day of May, 2019.



Notary Public

My Appointment Expires:
11-3-2022



CERTIFICATE OF SERVICE

I hereby certify that on the 2nd day of May, 2019, a true and correct copy of the above and foregoing Post-Hearing Brief was filed with the Kansas Corporation Commission and served by electronic mail as follows:

Adam and Jessica Pickett, *pro se*
22617 W. Irish Creek Rd.
Arlington, KS 67514
Pickettfamilyfarming@gmail.com

Lauren Wright
Litigation Counsel
Kansas Corporation Commission
266 N. Main, Suite 220
Wichita, KS 67202-1513
l.wright@kcc.ks.gov

Jonathan R. Myers
Assistant General Counsel
Kansas Corporation Commission
266 N. Main, Suite 220
Wichita, KS 67202-1513
j.myers@kcc.ks.gov

/s/ David E. Bengtson
David E. Bengtson