

Before the State Corporation Commission

Of the State of Kansas:

In the Matter of the Application of Orca

Docket No: 19-CONS-3266-CUIC

Operating Company, LLC to Authorize

Conservation Division

Injection of Saltwater into the Arbuckle

License Number: 5135

Formation at the Shoffner SWD #12-1,

Located in Section 12, Township 25 South,

Range 9 West, Reno County, Kansas

Conclusionary Statement

The Kansas Corporation Commission has been serving the citizens of Kansas since 1883 as one of the first state regulatory agencies in the nation. The mission statement of the Conservation Division states, "Its mission is to protect the correlative rights and **environmental resources** with effective regulatory oversight of oil and natural gas exploration and production activities, and intrastate gas storage." From the onset of this project we have questioned the location of the drill site and its impact on Kansas's most valuable environmental resource, water.

To clarify, we are not "against" oil. Our family owns several producing wells in western Kansas. We did not protest Orca's wishes to drill an oil well. They, along with property owners who have leased their mineral rights, have the right to explore for oil and gas responsibly. We are protesting the saltwater disposal well that Orca is asking the KCC to permit.

Our concerns regarding leaks are not unfounded fears, but come from dealing, first hand, with the kinds of messes we are concerned about here. The photographs in our pre-filed testimony of tank batteries burning or exploding were taken at actual locations we responded to. We were personally involved with the attempts then to mitigate the damage. We've seen what happens when these "unlikely events" that can be "guarded against" happen. We've been there when oil company personnel on scene are unable to finish their shut down procedures out lined in their spill plan due to extremely hazardous conditions. We lived in a house that had contaminated water from a saltwater leak. Our testimony is not based on text books and treatises. It is from real life personal experience.

We are against undue risk to the local environment when there are other options to reduce risk. We want to be sure that prudent and careful operators run the wells. An operator that is aware of, understands and respects the laws, regulations and authoritative bodies of the State of Kansas and how they apply to these operations. Not an operator who's "looking into state regulations" after they've already started major, non-permitted, operations.

We stated in our very first letter to the KCC and Orca our concerns with the placement of the well site. We were concerned about spills and leaks both during construction and during production. The location of this site allows little time for stopping a spill before contaminating surface and subsurface water. Along with concerns of old wells on our property providing a pathway for injected fluids to migrate to the surface or into the water table. We questioned the plugging standards and technology that were used when these wells were plugged. We suggested moving the well north a short distance. This would allow personnel more time to contain any leaks or spills before they reach the waterway.

During my time in the military and the fire service we always have a plan of action. There is a plan for everything. If that plan doesn't work you fall back to plans B, C, or D. Orca's spill response plan for controlling saltwater leaks is nearly non-existent. It's not even implemented until *after* the well is producing, not during construction. Orca was asked about providing training to local first responders, but they said they do not provide training. Then, in an effort to appear diligent in their efforts to develop a sound plan, they provided you with sample forms you can find on the internet.

Orca relies on an out of state clean up contractor to respond within 24 hours. This is a **cleanup contractor** not a spill mitigation team. A leak would be detected by the employee who checks the wells once a day. There is a 24-hour window where a leak could happen shortly after the well is checked and not noticed until the next day. It could then take another 24 hours for a cleanup team to arrive from out of state. In those 48 hours 840,000 gallons of saltwater can easily run off the drill pad, absorb into the ground and run into the stream next to the proposed site. And that doesn't include the amount of continued leakage and spills while crews are trying to shut down the system. This saltwater can then flow two miles to the Silver Creek, five miles to the North Fork of the Ninnescah River, seventeen miles to Cheney Reservoir, through a 60-inch pipe that runs along 21st Street into Wichita Kansas' drinking water supply, potentially implicating over 400,000 Kansans.

According to Orca, their spill kits contain absorbent pads and booms for building underflow dams. If they are universal absorbent pads, they can only hold up to 31 gallons of water per package. It would take a lot of pads for a well slated at 10,000 barrels a day. The booms are used for making underflow dams. The booms allow oil to be contained and clean water to keep flowing under the boom. These work for oil because water and oil are immiscible. This system does not work for saltwater leaks.

Saltwater is miscible with fresh water, it mixes. To control salt water from entering a stream, it would have to be dammed, diked, or diverted with the understanding that the soil and possible ground water it contacts will be contaminated in an effort to keep the spill from spreading downstream. Once the saltwater is in the stream, the plume of saltwater will work its way down stream. The plume will contaminate surface and subsurface water. This water is used by Kansans' for drinking, crops, livestock, and habitat. Crews would have to get ahead of the plume and dam the river or wait for the plume to be diluted. You can't simply use a couple of vacuum trucks to remove the saltwater off the fresh water like you would with an oil spill. The saltwater is a major hazard that can destroy many environmental resources. Orca is placing this well in a known flood plain and sensitive ground water area with an un-

thought out plan for spills and leaks. This is foolish, irresponsible, and reckless. Within a mile radius of this site there are no other streams, ponds or swamps. The land is open farm ground or CRP grass.

To add to the concerns of saltwater leaking, Orca has asked for a well casing that is 4.5 inches. Chairman Keen touched on this and advised that most of the wells in Kansas use 2.5-inch casing. Orca response was this was necessary due to friction loss. A basic understanding of hydraulics dictates that when the diameter of a pipe doubles, the area of the pipe increases approximately four times. Going from 2.5 to 4.5-inch piping is excessive compared to local industry standards in Kansas. A massive amount of product could be sent down this well with a surface operating pressure of 250psi, which equals subsurface discharge pressure of nearly 2000psi at 4300 feet with very limited friction loss. The disposal well casing will allow Orca to reach their requested 10,000 barrels in less than a few hours. Orca stated that they hoped to be able to use the disposal well for other future wells in the area. Orca plans to dispose more saltwater into a flood plain raising the risk even higher. Orca can place an injection well at a different location and pipe or haul their saltwater there. Other operators in Kansas do this routinely.

In conclusion, Orca chose to dismiss local citizens' concerns about their location of a disposal well. They chose to ignore state and local zoning laws concerning work done in flood plains, even though they were aware of the requirements. They failed to develop and provide a sufficient emergency response plan for either the drilling phase or the production phase that deals with saltwater. They have requested a well that is capable of discharging over twice as much saltwater back into the ground than standard amounts by Kansas Oil producers. Their sense of entitlement to do as they please and plead ignorance of state laws as a defense is insulting and shows complete disrespect to local and state officials, including the KCC, and to all Kansans. At the very least, the KCC should deny Orca's choice of proposed location for this disposal well and follow its duty to protect the state's environmental resources.

Signed;

Adam and Jessica Pickett

Certificate of Service

I, the undersigned, certify that the true copy of the attached order has been served to the following parties by means of electronic service on the 2nd of May, 2019.

Adam & Jessica Pickett

22617 W. Irish Creek Rd

Arlington, KS 67514

pickettfamilyfarming@gmail.com

Jonathan R. Myers, Assistant General Counsel

Kansas Corporation Commission

266 N. Main St, Ste. 220

Wichita, KS 67202-1513

j.myer@kcc.ks.gov

Lauren Wright, Litigation Counsel

Kansas Corporation Commission

266 N. Main St, Ste. 220

Wichita, KS 67202-1513

l.wright@kcc.ks.gov

David E. Bengtson, Attorney

Stinson Leonard Street LLP

1625 N Waterfront PKWY Ste. 300

Wichita, KS 67206

david.bengtson@stinson.com

Signed: Adam Pickett

5/2/19 Adam Pickett