

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of TDR Construction,) Docket No.19-CONS-3167- CUIC
Inc. to Authorize Injection of Saltwater into the)
Squirrel Formation at the McCoy #4WA, #8W and) License No. 32218
#9W Wells, Located in Section 32, Township 15)
South, Range 21 East, Franklin County, Kansas.) Conservation Division

PRE-FILED DIRECT TESTIMONY OF LANCE TOWN

I. BACKGROUND INFORMATION AND QUALIFICATIONS

Q. STATE YOUR NAME AND BUSINESS ADDRESS FOR THE RECORD.

A. My name is Lance Town. My business address is TDR Construction, Inc., P.O. Box 339,
Louisburg, Kansas 66053.

Q. WHAT IS YOUR OCCUPATION?

A. I am self employed as an owner and officer of TDR Construction, Inc., ("TDR") which owns
and operates oil and gas leases in eastern Kansas. I am also an owner and officer of Town
Oilfield Service, Inc. ("TOS"), which is an oil and gas service company, that provides drilling,
pulling, plugging and other related services to numerous oil and gas operators in eastern
Kansas. I am also an owner and officer of additional companies involved in oil and gas related
activities similar to those engaged in by TDR and TOS.

Q. WHAT WAS THE NATURE OF YOUR EMPLOYMENT PRIOR TO THAT TIME?

A. I am a third generation oil producer and have been around the oil business my whole life. I
started working full time for Town Oil Company in 1991, and performed a number of duties
while employed in that capacity including field maintenance, pumping, employee supervision,
and regulatory compliance. I started my first oil and gas related company in 1996 and since

1 that time I have been self employed as an oil producer and oil field service provider in eastern
2 Kansas.

3 Q. DOES TOS PROVIDE OILFIELD SERVICE WORK TO COMPANIES OTHER THAN
4 THOSE WHICH YOU ARE AFFILIATED WITH?

5 A. Absolutely. TOS owns two drilling rigs and is responsible for drilling approximately 250 to
6 300 wells per year for many different operators on a contract basis. In addition, TOS provides
7 various other oil field services upon numerous eastern Kansas oil and gas leases.

8 **II. PURPOSE OF THE SUBJECT APPLICATION**

9 Q. WHAT IS THE PURPOSE FOR FILING THE APPLICATION WHICH IS THE SUBJECT
10 OF THIS DOCKET?

11 A. To obtain design approval for three injection wells on the McCoy Lease located in the NE/4
12 of S32-T15-R21 in Franklin County, Kansas under existing permit numbered E-31,984.
13 Injection authority was obtained for certain injection wells located upon the McCoy Lease by
14 and through permit E-31,984 in 2014, and Area Notice of such application was given pursuant
15 to K.A.R. 82-3-402, and a memorandum of notification was recorded in the office of the
16 Register of Deeds for Franklin County, Kansas at such time. Said memorandum of Area
17 Permit Notice indicated that the project which was the subject of such Area Permit Notice
18 would contain approximately 35 injection wells. Injection wells have been operating upon the
19 McCoy Lease since 2014 and this Application simply seeks to add three additional injection
20 wells to the McCoy Lease project to more fully develop such project.

21 Q. PLEASE DESCRIBE THE PROJECT TDR IS CONDUCTING ON THE MCCOY LEASE
22 THAT HAS LED TO THE FILING OF THE SUBJECT APPLICATIONS.

23 A. TDR began developing the McCoy lease in 2014 and has drilled multiple production and

1 injection wells upon the McCoy Lease in a five-spot pattern and such wells have been in
2 operation since 2014. TDR is now in the process of more fully developing the McCoy Lease.
3 The three additional injection wells which are the subject of this Docket will operate in
4 precisely the same manner as the existing injection wells upon the McCoy Lease have
5 operated since 2014. It is common practice to drill injection wells in eastern Kansas as part
6 of the development process to maximize ultimate recovery of oil. Without a proper water
7 flood using the subject injection wells, significantly less oil will be recovered from the
8 production wells on the McCoy Lease thereby wasting a portion of the recoverable oil beneath
9 said lease.

10 Q. AS PART OF THE APPLICATION PROCESS, YOU WERE REQUIRED TO PUBLISH
11 NOTICE OF THE SUBJECT APPLICATION. DID TDR COMPLY WITH THESE NOTICE
12 REQUIREMENTS?

13 A. Yes.

14 Q. WILL THE INJECTION WELLS WHICH ARE THE SUBJECT OF THE PENDING
15 APPLICATION COMPLY WITH ALL APPLICABLE RULES AND REGULATIONS
16 PROMULGATED BY THE KANSAS CORPORATION COMMISSION?

17 A. Yes.

18 Q. IN YOUR OPINION WILL THE WELL CONSTRUCTION AND DESIGN PROPERLY
19 PROTECT THE FRESH AND USABLE WATER RESOURCES IN THE AREA?

20 A. Yes.

21 Q. IN YOUR OPINION WILL INJECTION INTO THE SQUIRREL FORMATION THROUGH
22 THE SUBJECT INJECTION WELLS BE CONTAINED WITHIN THE SAID SQUIRREL
23 FORMATION?

1 A. Yes.

2 Q. IN YOUR OPINION WILL INJECTION AT THE PROPOSED RATES AND PRESSURES
3 THROUGH THE SUBJECT THREE INJECTION WELLS INTO THE SQUIRREL
4 FORMATION INITIATE FRACTURES THROUGH THE STRATA OVERLAYING THE
5 SAID SQUIRREL FORMATION THAT COULD ENABLE THE FLUID OR FORMATION
6 FLUID TO ENTER FRESH AND USABLE WATER STRATA?

7 A. No. Injection at the rates and pressures proposed in the subject application are very common
8 in this area for injection wells into the Squirrel formation. In addition, the subject wells are
9 quite literally surrounded by hundreds of production and injection wells being operated upon
10 neighboring leases and on the McCoy Lease. All of these wells are operating very similarly
11 if not identically to how the wells which are the subject of this Docket will be operated, and
12 no ill effects have been attributed to any of these wells since they have been placed into
13 operation.

14 Q. THE SUBJECT APPLICATIONS REQUEST A MAXIMUM INJECTION RATE OF 100
15 BBLS/DAY AND A MAXIMUM INJECTION PRESSURE OF 600 PSIG, PLEASE
16 EXPLAIN WHY THESE RATES AND PRESSURES ARE NEEDED?

17 A. The Squirrel formation is a very tight formation and higher pressures are required in order to
18 get this reservoir to accept water in a manner that is conducive to an effective waterflood. If
19 the subject authority is obtained we will begin injection at the maximum 600 psig requested
20 in the application. In my opinion we would not be able to operate an effective waterflood upon
21 the McCoy Lease using injection pressures less than 600 psig, and a portion of the recoverable
22 oil would be left unrecovered and waste will occur. The injection rate is important as well,
23 because in order to operate an effective waterflood on the McCoy Lease it is critical that we

1 inject more fluid into the reservoir than is removed through the production wells. Therefore,
2 all of the produced water from the existing production wells and also additional volumes of
3 water will be injected into the subject injection wells located upon the McCoy Lease.
4 Therefore, the request for 100 bbls/day is based upon the needs of the waterflood program that
5 is proposed upon the McCoy Lease. In addition, both the injection rate and volume are
6 consistent with other operations in the area and also with the rates and pressures approved by
7 the Commission on other injection wells in the area.

8 Q. ARE ALL OF THE WELLS WITHIN A QUARTER MILE RADIUS OF THESE
9 INJECTION WELLS COMPLETED IN A MANNER TO PROTECT FRESH AND USABLE
10 WATER RESOURCES?

11 A. I believe they are.

12 Q. THE PROTESTANTS HAVE EXPRESSED A CONCERN ABOUT CONTAMINATION
13 OF THE MARAIS DES CYGNES RIVER CAN YOU PLEASE SPEAK TO THOSE
14 CONCERNS?

15 A. Attached hereto as Exhibit 'LT-1' is a map which highlights in blue the rough path of Spring
16 Creek from the vicinity of the subject lease to its confluence with the Marais des Cygnes
17 River. Even if some water injected into the wells which are the subject of this Docket were
18 released through some unforeseen event, such water would have to travel roughly 1/3 of a mile
19 over land to reach Spring Creek, from there it would have to follow the meandering path of
20 Spring Creek for more than eleven miles before it could have any possibility of reaching the
21 Marais des Cygnes River. The likelihood of any water which is injected into the wells which
22 are the subject of this Docket having any real possibility of reaching the Marais des Cygnes
23 River is extremely remote and maybe even impossible. Moreover, even if some trace of the

1 water which is injected into the wells which are the subject of this Docket were to reach the
2 Marais des Cygnes River such water would be diluted by its long journey down Spring Creek
3 and then down the Marais des Cygnes River to such a degree that it would be all but
4 impossible to for the subject wells to impair RWD 6's ability to source its water from the
5 Marais des Cygnes River. Moreover, there are quite literally hundreds of existing injection
6 and production wells located between the wells which are the subject of this Application and
7 the Marais des Cygnes River. The removal and reinjection of fluid through these existing
8 wells would preclude any possibility that water injected into the subject wells could reach the
9 Marais des Cygnes River in concentrations that would impair RWD 6's ability to source its
10 water from such river.

11 In addition, it should be noted that underground injection of waste water and other
12 substances originally began as an environmental measure to prevent the pollution of surface
13 and ground waters. The subject wells will help to reduce any risk of pollution to surface and
14 ground waters, by immediately returning produced water to the formation from which it was
15 removed, they will not increase these risks. When water is inevitably produced as part of oil
16 production there are really two options to deal with such water, i.e. store the water above
17 ground and transport it off site to another disposal well/surface pond, or immediately reinject
18 the water through on onsite injection wells. Storing the produced water on site and transporting
19 it poses a greater risk to surface waters such as the Marais des Cygnes River for instance than
20 re-injecting it through the subject injection wells. I believe there is a far greater risk that
21 produced water would be spilled while it is being stored on the surface, being pumped into a
22 truck and then subsequently transported to and disposed of into another well than if it were
23 simply reinjected onsite through the proposed closed injection system.

Moreover, if the subject injection wells are not approved, TDR will be unable to conduct an effective water flood upon the McCoy Lease and a portion of the otherwise recoverable oil beneath said lease will be left unrecoverable and waste will occur. The primary purpose of the subject three injection wells is not to simply get rid of produced water, instead the primary purpose of these wells are to enhance the production from the McCoy Lease and to maximize the ultimate recovery of the oil in place beneath said lease.

Q. PLEASE DESCRIBE THE PROPOSED WELL COMPLETION AND DESIGN FOR THE SUBJECT WELLS?

A. In drilling the subject injection wells we will drill down approximately 21 feet, and set that length of 8 5/8 inch surface casing, and pump cement up the backside of that pipe for its entire length. Then we will drill down to the total depth in the Squirrel formation which is the formation that the subject wells will inject into, and completed the wells using 2.875" casing and pump cement up the back side of that casing for its entire length. After the wells are completed Mechanical Integrity Tests ("MIT") will be performed upon each of these wells to ensure the integrity of the well construction. Even though the subject applications request a maximum injection rate of 600 psig, we typically pressure each of the subject wells up to 1,000 psig during the MIT's as an additional precaution to ensure the integrity of well construction. All of the subject wells must pass the MIT tests with no issues, and will be tested every five years thereafter as required by KCC regulations. Additionally, the McCoy Lease is inspected every day by a company employee who is knowledgeable enough to detect any issues that could arise, such as leaks, excessive pressures, etc. We believe that with the well construction techniques utilized, the MIT testing, and the daily monitoring by our employees the subject wells sufficiently protect all fresh and usable water wells, aquifers and ponds.

1 Q. ARE THERE ANY OTHER FACTS WHICH YOU BELIEVE ARE IMPORTANT TO
2 PRESENT TO THE COMMISSION?

3 A. Yes. As further evidence of my confidence in my opinion expressed herein I would like the
4 Commission to know that the subject wells are located upon real property that is owned in fee
5 by TDR. Therefore TDR would never do anything upon such property that would impair the
6 value of such property or create a real risk of pollution thereon. Moreover, my family and I
7 live less than a mile from the proposed wells and I have wells which are similar to those being
8 requested herein located in the yard around my home. These facts provide further evidence and
9 assurance to the Commission that I see no real risk associated with the proposed wells or
10 injection wells operated in the same manner as the subject wells.

11 Q. IN YOUR OPINION DO THE SUBJECT INJECTION WELLS POSE A SIGNIFICANT
12 RISK TO FRESH AND USABLE GROUND WATER FORMATIONS IN THE AREA?

13 A. No.

14 Q. DO YOU BELIEVE THAT THE GRANTING OF THIS APPLICATION WILL ALLOW
15 INCREASED PRODUCTION ON THE MCCOY LEASE WITHOUT CAUSING ANY
16 HARM TO FRESH AND USABLE WATER IN THE AREA?

17 A. Yes.

18 Q. DOES THIS COMPLETE YOUR TESTIMONY TO THE COMMISSION?

19 A. Yes.

VERIFICATION OF LANCE TOWN

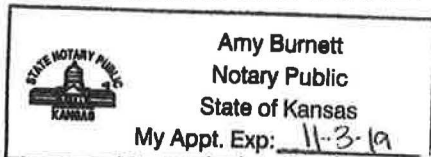
STATE OF KANSAS)
) ss:
COUNTY OF Miami)

Lance Town, being duly sworn, upon his oath states that he has read the document title "Pre-filed Testimony of Lance Town" to which this Verification is attached, that he is aware of its contents, and declares that the statements contained in said document are true and correct to the best of his information, knowledge and belief.

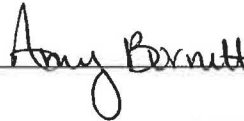


Lance Town

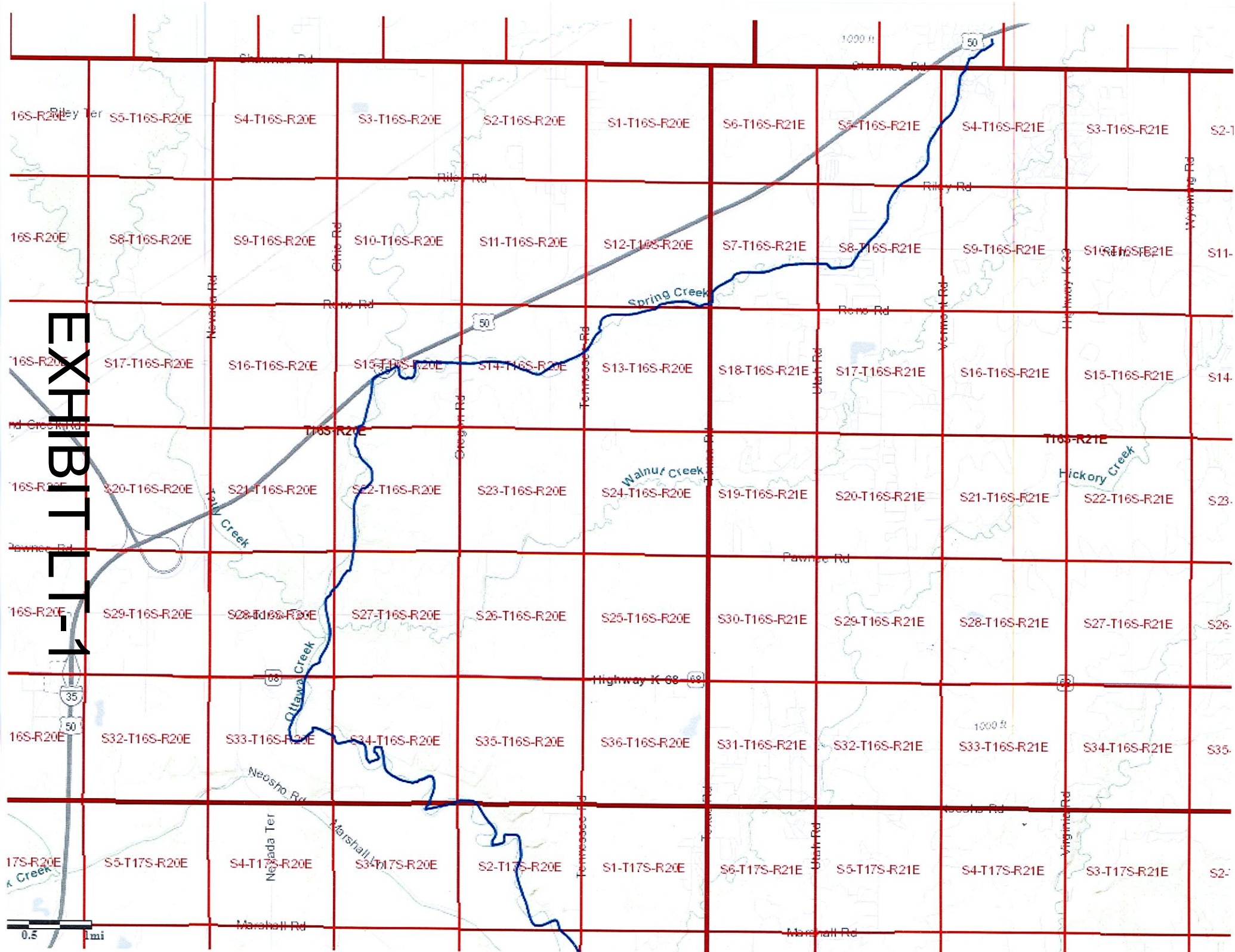
SUBSCRIBED AND SWORN to before me on this 18th day of February, 2019.



Appointment/Commission Expires: 11-3-19



Notary Public



CERTIFICATE OF SERVICE

I hereby certify that a copy of the above and foregoing was sent via electronic mail, this 25th day of February, 2019, addressed to:

Jonathan R. Myers
j.myers@kcc.ks.gov

Lauren Wright
l.wright@kcc.ks.gov

Paul Jewell
pauljewell@msn.com

Roxanne Mettenburg
citizenmett@gmail.com

Jake Eastes
j.eastes@kcc.ks.gov

Rene Stucky
r.stucky@kcc.ks.gov

Lisa Jewell
edjewell59@hotmail.com

Polly Shteamer
pshteamer@gmail.com

Scott Yeargain
j201942@yahoo.com



Keith A. Brock