2014.07.22 11:15:00 Kansas Corporation Commission 787 Thomas A. Day

## BEFORE THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

4 5 6 7 8 9 10 11 12	of A Auti Wat At T Al-2, Al-10	HE MATTER OF THE APPLICATION ) ALTAVISTA ENERGY, INC., TO ) HORIZE THE INJECTION OF SALT ) TER INTO THE SQUIRREL FORMATION ) THE JIM BELL LEASE,, WELL NO. AI-1, ) AI-3, AI-4, AI-5, AI-6, AI-7, AI-8, AI-9, ) D, AI-11, AI-12, AI-13, AI-14 AND AI-16, ) ATED IN DOUGLAS COUNTY, KANSAS )
13 14 15 16 17 18		PREFILED TESTIMONY OF PHIL FRICK OF ALTAVISTA ENERGY, INC.
19	Q.	Please state your name.
20	A.	Phillip Frick.
21	Q.	Please state your business address.
22	Α.	4595 K-33 Highway, Wellsville, KS 66092.
23	Q.	What is the name of your business and what type of business do you conduct?
24	A.	Altavista Energy, Inc. We are an oil and gas exploration and production
25		company.
26	Q.	Could you please give the Commission a brief summary of your educational
27		background, employment history and experience in the oil and gas industry?
28	Α.	I have a BS in Business Administration from the University of Kansas. I worked in
29		compliance and IT in the banking sector for several years, and moved to the oil
30		and gas industry in 2007 with Enerjex Resources doing compliance, land and
31		legal work. I started with Altavista Energy, Inc., in April of 2010. In the course of
32		my employment in the oil and gas industry I have performed a number of diverse
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LEGAL SECTION

tasks including well pulling, pumping, roustabout work, observation of drilling,
 cementing and hydraulic fracturing jobs, all facets of land work, all KCC and EPA
 related compliance work, GPS mapping, accounting and administering both
 purchase and sale transactions.

Q. Could you please describe for the Commission the project Altavista Energy, Inc.
 is conducting on the Jim Bell lease that led to the filing of the subject
 Applications?

8 Α. Altavista Energy acquired the Jim Bell lease as part of a larger transaction in 9 2011. At that time it had four producing wells on it, and made approximately 0.3 10 bopd. We drilled seven additional producing wells and seven injection wells on the eastern side of the lease in 2011, and increased production to approximately 11 12 3.0 bopd. In late 2013 we decided to try the western side of the lease as it was 13 relatively unexplored, and found significantly more oil; we drilled and completed 14 10 producing wells, and the 8 additional injection wells in the form of an 'inline 15 330' pattern. This is the same pattern being used by the previously approved injection wells, AI-1 through AI-7, and they have been injecting since January of 16 17 2012 with no ill effects. It is common practice to drill injection wells in eastern Kansas as part of the development process to maximize the recovery of oil. Of 18 19 the 49 leases that Altavista Energy or its related companies currently operate, 48 20 of them have injection wells. Without a proper waterflood (via injection wells), 21 significantly less oil will be recovered from our new development on the Jim Bell 22 Lease, thereby wasting the natural resources of the State of Kansas.

Q. As part of the Application process, you were required to publish notice, as well as
 give notice by mail to all landowners and leasehold interest owners within a half
 mile of the Jim Bell lease boundary. Did you do that and could you tell the
 Commission how many people were notified by mail of this Application?

- 5 A. I did perform the required notice procedures. There were 19 parties notified by 6 mail.
- 7 Q. Of those 19 people notified, how many Protests were received?
- 8 A. One Protest involving five parties.
- 9 Q. Upon receipt of the Protest, what did you do to try to address their concerns?
- 10 A. I attempted to contact each party listed, and either spoke to someone at that 11 number or left a message. One of the parties, Franklin Turley, dropped his 12 protest after our conversation. The other four parties indicated they wanted to 13 continue the Protest and go to a hearing.
- Q. Are you aware of whether the KCC staff also attempted to address the
   Protestant's concerns and if so, in what way?
- A. I was present at a pre-hearing on Thursday, June 5<sup>th</sup>, 2014, in which Ralph
   Tomlinson (one of the Protestants) called in to discuss the matter with the KCC
   staff. In the course of that pre-hearing it sounded like there had been additional
   conversations with KCC staff regarding the applications.
- 20 Q. Were either of these attempts successful?
- A. They were not, in terms of totally alleviating their concerns.
- Q. Do you believe the well construction design complies with the KCC regulations
  and will properly protect the fresh and usable water resources in the area?

1 A. I do.

Q. Are the surrounding wells within a quarter mile radius of these injection wells
 completed in a manner to protect fresh and usable water resources?

4 A. I believe that they are.

Q. In their protest, the Protestants expressed their concern about fresh water wells
 in the area and the watershed of the Douglas County State Fishing Lake. Could
 you address those concerns?

8 Α. When we drilled our injection wells on this lease, we first drilled down 9 approximately 40-60 feet and set that length of 7" surface casing (pipe). It is 10 cemented in from bottom to top. Next, the wells drilled down to their total depth 11 past the oil bearing formation (where we inject), and then completed using 2.875" 12 threaded pipe that is cemented in place from just below the total depth of the well 13 casing to the surface. In other words, the entire well is cased with pipe that is encased in cement for its entire length. And there are two layers of pipe and 14 15 cement for the top 40-60 feet. To be certain that the well was constructed properly, it is then given a Mechanical Integrity Test before it can be approved for 16 17 use as an injection well. This is done in the presence of a KCC representative, 18 who monitors the test and signs off on it. All of our Jim Bell wells passed the MIT 19 testing with no issues, and will be tested every five years as is required. 20 Additionally, the lease is visited by a company employee (a pumper) every day, 21 who is knowledgeable enough to detect any issues with specific wells (leaks, 22 excessive pressures, etc.). We believe that with the well construction techniques 23 utilized, the additional testing for verification, and the daily monitoring by our

employees that our wells sufficiently protect all freshwater sources. Additionally, when the wells have come to the end of their useful life, our company or whoever the current operator is will be obligated to plug the wells. These plugging operations are regulated by the KCC and we don't believe there will be water contamination issues once the wells are plugged. With a column of cement filling the entire well, the possibilities of contamination are again, very remote.

Q. The Protestants have also stated concerns about the amount of water used by
these wells, as well as what happens to any wastewater. Would you please
address those concerns?

10 A. Much of the water used is water that is produced with the oil. Additional water is 11 provided by a Rural Water Meter, which is approved for such use by the Rural 12 Water District. No water is used in the injection wells directly from the aquifer in 13 the area, and the water is cycled through the injection wells repeatedly; no 14 disposal is required.

Q. The Protestants have also stated concerns about backflow from the wells
 containing radioactive material. Could you please address those concerns?

A. The injection system is a 'closed system', effectively cycling any water produced from the oil bearing formation back into the formation. The wells and pipelines have check valves to prevent any sort of 'back flow', and no significant radiation is present in the oil producing formation that we are aware of.

Q. The Protestants have also stated concerns about seismic activity related to
 injection wells. Could you please address those concerns?

1 Α. Given the pressures, volumes and depths involved in Eastern Kansas oil 2 production, we believe increased seismicity due to our operations is extremely 3 remote. News regarding increased seismic activity related to oil and gas 4 development has come from deep horizontal drilling in shale and disposing of 5 enormous volumes of water in disposal wells, which is dramatically different from 6 the type of drilling and completions we do in Eastern Kansas. The KCC staff is 7 better educated to address these matters, but given the lack of any evidence of 8 oil and gas drilling causing seismic activity in our area, despite approximately 100 9 years of oil and gas activity, I'm comfortable stating that these particular injection 10 wells are extremely unlikely to cause earthquakes.

Q. Based upon your experience in the oil and gas industry, is the use of salt water
injection wells in the shallow fields in this area a common practice?

A. Salt water injection wells are very common in eastern Kansas. As stated previously, 98% of our leases have salt water injection wells, and I would add that the lease that doesn't would benefit from them. We just haven't gotten to that lease to drill injection wells yet. In my experience, it is more unusual to find leases in eastern Kansas that do not have injection wells than it is to find those that do. In the past 3 years, I would estimate that we have drilled over 200 injection wells, all of which have been approved.

Q. Based upon your experience with these other projects, are you aware of any
 harm that has occurred to fresh and usable water in the area?

22 A. I am not.

- Q. Do you believe that the granting of this Application will allow increased
   production on the Jim Bell lease without causing any harm to fresh and usable
   water in the area?
- 4 A. I do.