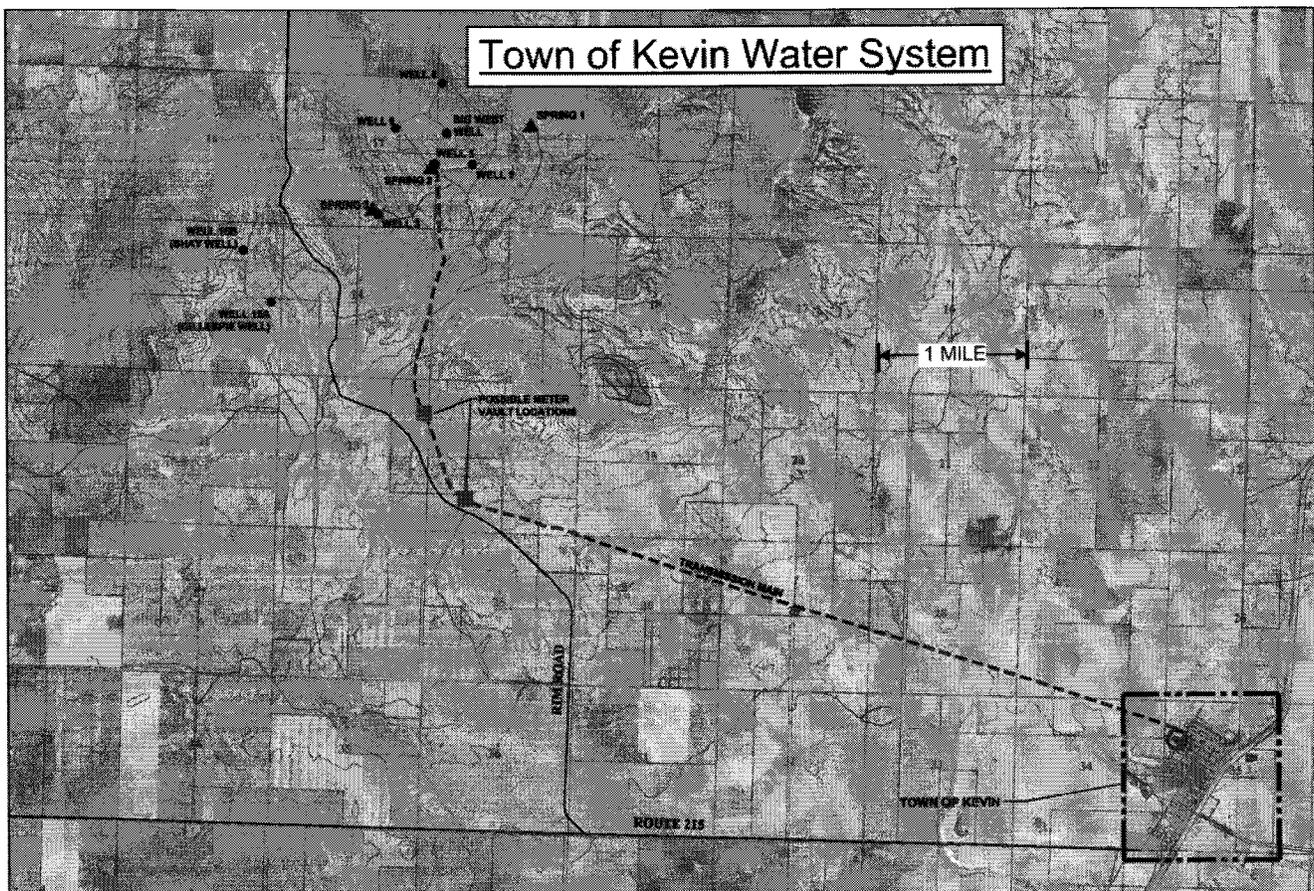


Town of Kevin Water System  
MDNRC RRGL Grant Application 2010  
Phase 3 Water System Improvements

EXHIBIT 13  
DATE Jan 28, 2011  
HB 6

- The Town of Kevin's water system is very large for a small town of 200 people (see the aerial photo below.)
  - Distance to some of its sources exceeds seven miles.
  - The upper 3 ½ miles of cast iron transmission main from the sources is 55-60 years old.
- Current 2010-11 construction of Phases 1 and 2 includes improvements to the sources and treatment mandated by MDEQ.
- During construction of previously planned system improvements in 2010, it became obvious that the transmission main was in worse condition than originally believed:
  - The old transmission main had to be pressurized at various times in 2010.
  - Five serious water main breaks occurred in 2010 (see photo on next page).
  - Another leak has recently appeared.
  - Breaks are due to "graphitization" of the cast iron water main.
  - Some of the breaks appeared to be quite old; leaking for a long time.
  - Need to replace as much of the old main because it will now be under more pressure.
- Cost of connecting to North Central MT Rural Water System is currently prohibitively high.



**Town of Kevin Transmission Main**

- 55-60 years old
- Installed in aggressive clay soils
- One of five circumferential (complete) breaks in 2010
- Cause – “Graphitization” of cast iron

