General

Luff Exploration Company respectfully requests permission to inject water long-term into the Miller 1-27, a short-radius, multi-lateral horizontal Red River “B” well. This well is within the Pete’s Creek Red River Unit (PCRRU) in the Pete’s Creek Field, Harding County, South Dakota. This secondary recovery unit was approved, based on technical and economic merit, by the South Dakota Board of Minerals and Environment on October 15, 2009 (Oil & Gas Case Number 06-2009). The Bureau of Land Management approved the unit the next day. It became effective November 1, 2009.

This application is submitted pursuant to SDCL Chapter 45-9, Section 45-9-13.

Tab sections, reflecting South Dakota application requirements (outlined in 74:10:09:02) organize this application.

The Miller 1-27 has a long history. It was originally a vertical well drilled in the 1970’s, producing from several Red River intervals. It was horizontally re-entered with two initial Red River “B” laterals. It was subsequently re-entered and a third Red River “B” lateral was drilled. After careful technical review, Luff Exploration Company, as operated of the PCRRU, has concluded that converting the PCRRU A-27H and the Miller 1-27 is the next logical step in the development of this secondary recovery project.

The requested maximum injection rate and maximum surface injection pressure values are consistent with approved values in the Pete’s Creek Red River Unit and the adjacent East Harding Springs Red River Unit.

Luff may request a higher surface injection pressure at a later date.

The requested duration of this application is 4,930,000 barrels of cumulative water injection. This is a conservative (high) estimate of cumulative injection for the life of the secondary recovery project.