



2017-003: Addressing Livestock Water Security Through Sulphate Removal Using Bioadsorbent Materials and Modified Forms

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While the Canadian Water Quality Guidelines recommend a maximum sulphate concentration of 1,000 mg/L, many livestock producers in Saskatchewan have reported high levels of sulphates in their water. This has led to a deficiency of copper, zinc, iron, and manganese that in turn causes lower growth rates, infertility, a depressed immune response, and even death in very high concentrations. Some sulphate management practices, like adding copper to feed, can be a cost effective. However, these solutions are more adequate for feedlot cattle. Dr. Wilson's team will create a prototype of a sulphate removal system that could also ultimately also remove phosphate as well.