

Regional Baseline Groundwater Assessment - Waskada Oil Field

Project Summary

Baseline Water Resource Inc. (Baseline Water) performed a Regional Baseline Groundwater Assessment (RBGA) within the Waskada Oilfield study area, near the Town of Waskada, Manitoba. Based on recommendations from the RBGA report, Baseline Water designed a groundwater monitoring program to assess baseline water quality prior to oil and gas activity.

The RBGA report provided an evaluation of regional-scale (450 km²) water resources in the Waskada area. The scope of work included characterization of regional hydrogeology and hydrology, identification of water usage, regulatory review, and recommendations for the protection and sustainable management of water resources.

The monitoring program established a reliable, high quality baseline groundwater data set prior to further oil and gas development. Groundwater samples from water wells were analyzed for routine physical and chemical parameters, as well as for compounds that are potential indicators of oil and gas activity, such as organic species commonly associated with hydraulic fracturing.

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Outcome

- Concise compilation of available hydrogeological literature and data.
- Understanding of regional water resource sensitivity.
- Characterization of water resource supply potential for industrial use.
- Established an effective groundwater and surface water monitoring program.
- Collection of baseline water data for future water quality comparison.
- Identification of data gaps.

