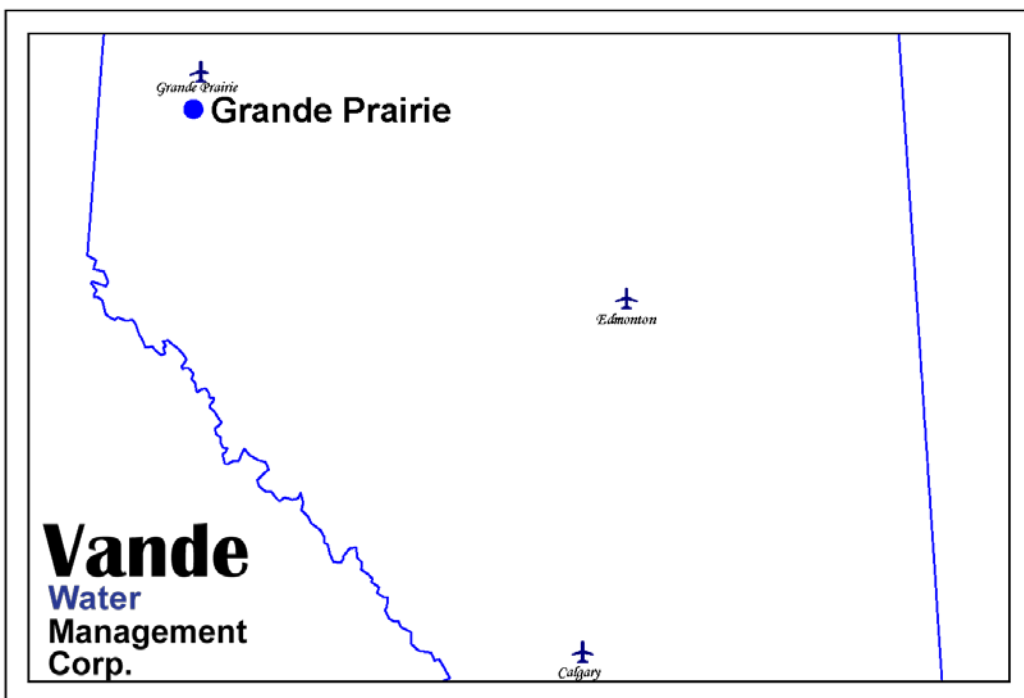


## Water Disposal Divestiture: Grande Prairie, Alberta

**Vande**  
Water  
Management  
Corp.

Vande Water Management Corp. ("Vande" or the "Company") has engaged Sayer Energy Advisors to assist the Company with the sale of its water injection project in the *Grande Prairie* area of Alberta (the "Project").

Vande holds a 100% working interest in a water disposal project strategically located in a highly developed area approximately 19 kilometres south of *Grande Prairie*. The Project has all season access from major roads and is ready for completion and construction of an injection facility.



The Project consists of an existing vertical disposal well located at 100/07-25-069-06W6/0 and a monitoring/injection well at 100/16-24-069-06W6/0. The disposal well is designed for water injection into the Cardium Formation. Vande owns the mineral rights in the Cardium Formation in Section 25-069-06W6.

## PROCESS & TIMELINE

Sayer Energy Advisors is accepting cash offers relating to this process until **12:00 pm on Thursday May 12, 2022**.

Timeline		
Week of April 11, 2022		Preliminary Information Distributed
Week of April 11, 2022		Data Room Opens
<b>May 12, 2022</b>	<b>12:00 noon</b>	<b>Bid Deadline</b>
May 1, 2022		Effective Date
June 2022		Closing Date

*Sayer Energy Advisors does not conduct a "second-round" bidding process; the intention is to attempt to conclude a transaction(s) with the party(ies) submitting the most acceptable proposal(s) at the conclusion of the process.*

**Sayer Energy Advisors is accepting cash offers from interested parties  
until noon on Thursday, May 12, 2022.**



## Grande Prairie Project

## Township 69, Range 6 W6

Vande holds a 100% working interest in a water disposal project strategically located in a highly developed area approximately 19 kilometres south of *Grande Prairie*.

The Project has all season access from major roads and is ready for completion and construction of an injection facility.

The Project consists of an existing vertical disposal well located at 100/07-25-069-06W6/0 and a monitoring/injection well at 100/16-24-069-06W6/0.



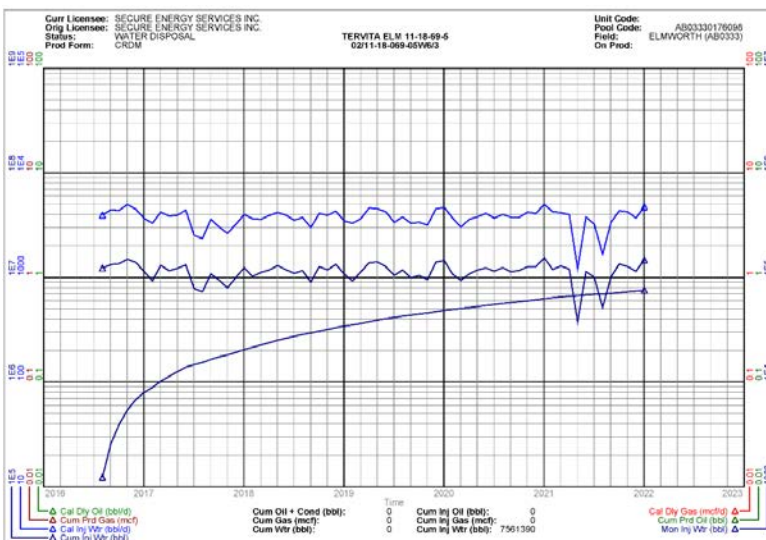
The disposal well is designed for water injection into the Cardium Formation. Vande owns the mineral rights in the Cardium Formation in Section 25-069-06W6.

The 07-25 injection well is licensed and able to accept Class II and Class Ib waste fluids. The well was previously approved for a total inlet rate of a maximum of 864 m<sup>3</sup>/d of water.

The 07-25 well was originally drilled in December 2006 and completed in the Dunvegan Formation. The 16-24 Cardium monitoring well is 0.78 kilometres away from the 07-25 well and was also completed in the Dunvegan Formation. The monitoring well is also a good candidate for 500 m<sup>3</sup>/d injection which can be implemented when the injection facility can warrant additional capacity.

The drilling and completions activity in this area has created a high demand for water disposal. The Project would prevent operators from hauling fluid long distances for disposal.

The Project is centered in an area with extremely high demand for disposal. Fluid production in the area is primarily from the Montney Formation. This suggests a large amount of potential for third party water disposal.



There are several offsetting Cardium injection wells which indicate the disposal capability including the well *Tervita Elm 102/11-18-069-05W6/3*, as shown on the adjacent injection plot.

The 02/11-18 well injected approximately 146,840 bbl (23,334 m<sup>3</sup>) of water into the Cardium Formation in January 2022. The 02/11-18 well has cumulative injection of 7.6 million barrels (1.2 million m<sup>3</sup>) of water to date.





The viability of the Cardium Formation for water disposal is supported by favourable reservoir characteristics, parameters, reservoir confinement, absence of hydrocarbons from nearby production and the aerial extent of the Cardium aquifer.

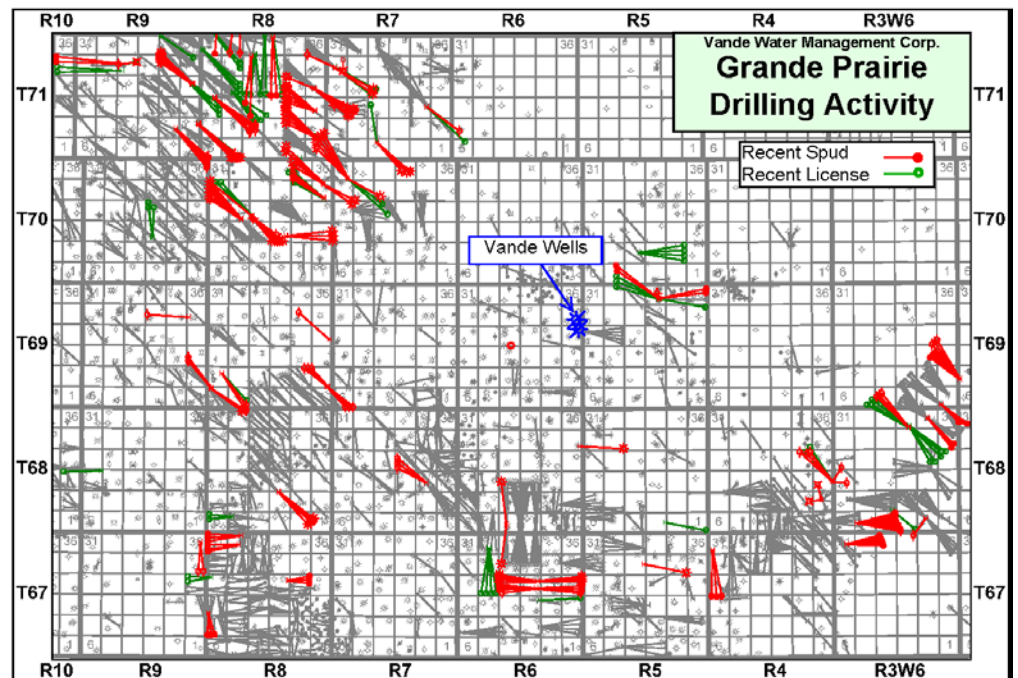
The Company has identified the Cardium Formation at *Grande Prairie* as having 18% average porosity over 12 metres of thickness at a depth of 793.8 to 810.0 metres in the 07-25 well. The Cardium sandstone is a coarsening upward sand sequence dominated by quartz, with lower and upper shoreface deposition.

The Cardium Formation is water saturated and there are no offsetting producing Cardium wells within the predicted zone. The nearest Cardium oil production is 35 miles to the south west at Wapiti.

The Cardium zone is confided by an impermeable cap and base rock. Vertical confinement is assured by the underlain shales of the Kaskapau and the tight sands and interbedded shales of the Cardium zone along with the overlain shales of the Muskiki formations. The general structure dips in a south direction at 17 metres per mile.

Based on a projected injection rate of 21 m<sup>3</sup>/hr over a 20-year period, Vande calculated the area of influence for the 07-25 well to be 0.736 kilometres for Class 1b disposal.

The offsetting map shows wells licensed in the last two years in green and wells drilled in the last two years in red. Active producers in the area include **Hammerhead Resources Inc.**, **NuVista Energy Ltd.**, **Ovintiv Canada ULC**, **Paramount Resources Ltd.**, **Pipestone Energy Corp.**, **Prairie Thunder Resources Ltd.**, **Ridgeback Resources Inc.**, **Spartan Delta Corp.**, **Tourmaline Oil Corp.**, and **Whitecap Resources Inc.**



## Project Development

Vande anticipates that the Project could be up and running within three months. The necessary steps to get the Project operational would be to first perform a re-completion on the 07-25 disposal well and carry out injection test requirements for D51 submission.

Following this, mechanical and electrical drawing packages construction and installation of equipment will be completed as listed on the Plot Plan/Process Flow Diagram which is available in the confidential virtual data room for review by parties that execute a confidentiality agreement.

Total costs associated with the startup of the disposal facility are estimated to be approximately \$3.5 million with \$3.25 million in remaining required capital. Vande is forecasting operating cash flow of approximately \$2.6 million per year based on projected third-party daily disposal volumes of 600 m<sup>3</sup>/d and a disposal fee of \$14.70/m<sup>3</sup>.

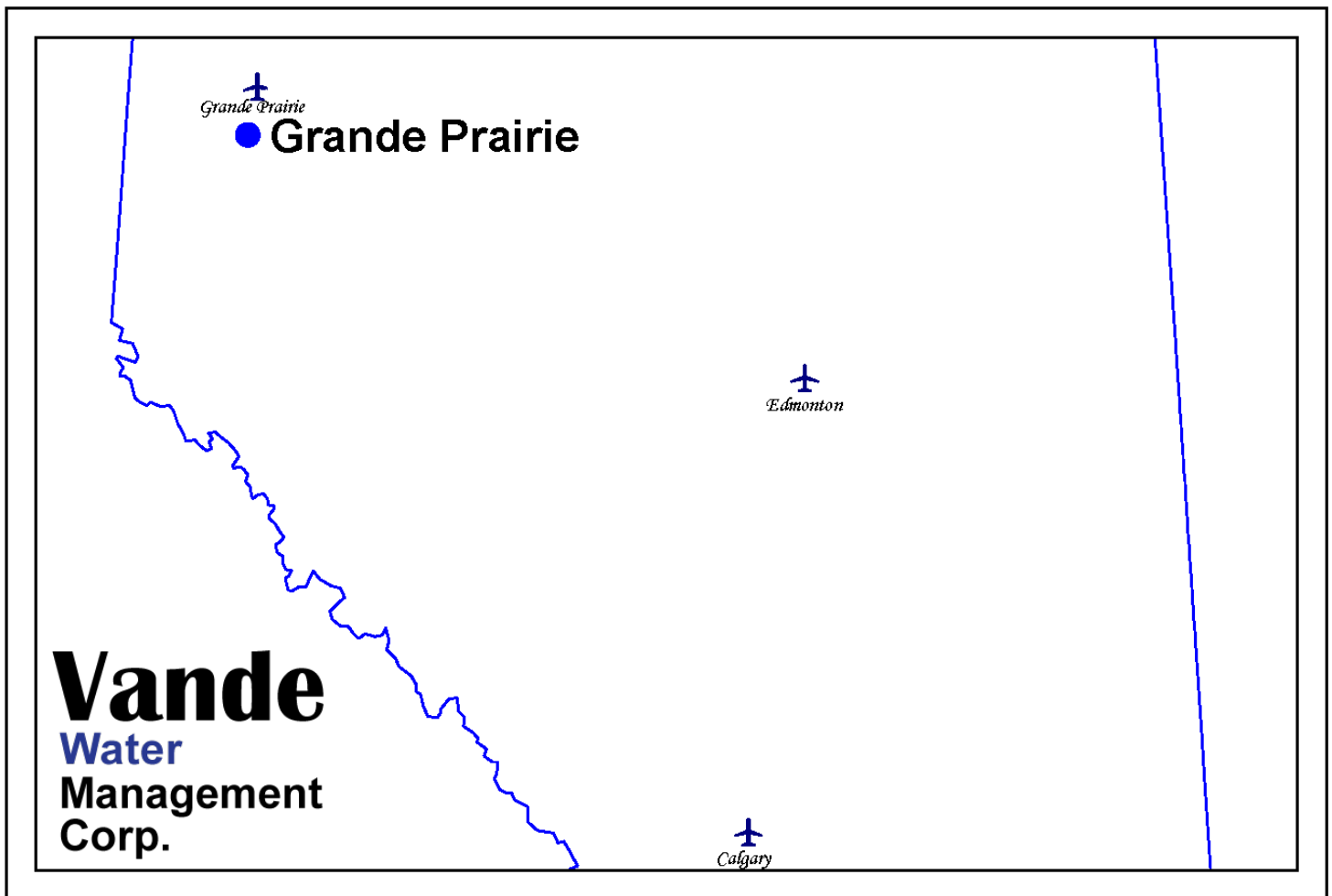




**BID DEADLINE: 12:00 pm May 12, 2022**

**Water Disposal Divestiture**

# **Vande Water Management Corp. Water Disposal Divestiture Spring 2022**



## **CONTACT:**

Parties wishing to receive access to the confidential information with detailed technical information relating to this opportunity should execute the confidentiality agreement which is available on Sayer Energy Advisors' website ([www.sayeradvisors.com](http://www.sayeradvisors.com)) and return one copy to Sayer Energy Advisors by courier, email ([brye@sayeradvisors.com](mailto:brye@sayeradvisors.com)) or fax (403.266.4467).

Included in the confidential information is the following: summary land information, facility plot plan and process flow diagram, permit applications and approvals, budget forecasts, and other relevant technical information.

To receive further information on the Project please contact Ben Rye, Tom Pavic or Grazina Palmer at 403.266.6133.



1620, 540 – 5<sup>th</sup> Avenue SW, Calgary, Alberta Canada T2P 0M2  
Tel: 403.266.6133 Fax: 403.266.4467 [www.sayeradvisors.com](http://www.sayeradvisors.com)