



**NORTH AMERICAN**  
**OIL SANDS CORPORATION**

# **PUBLIC DISCLOSURE DOCUMENT**

**Proposed  
Kai Kos Dehseh  
SAGD Project**







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## THE COMPANY

North American Oil Sands Corporation (North American) is a Canadian controlled oil sands company operating in north-eastern Alberta. The management team is comprised of industry leaders recognized for their extensive heavy oil technical and business experience. North American is a working interest owner and operator of approximately 12 townships of oil sands leases between Lac La Biche and Fort McMurray. Our goal is to develop the Kai Kos Dehseh project, producing up to 35,000 cubic metres (220,000 barrels) per day of bitumen through steam

assisted gravity drainage (SAGD) technology. The project will be located near Conklin, Alberta.

We also plan to build an upgrader facility to convert the bitumen into synthetic crude oil. North American's first choice for the location of the upgrader is on land that we have acquired in Strathcona County near Fort Saskatchewan, Alberta. A separate Public Disclosure Document and regulatory application will be filed for this facility.

## KAI KOS DEHSEH

When we acquired our first mineral leases in 2004, we knew the land was very special to the aboriginal people residing in the region.

On January 18, 2006, a group of Chipewyan Prairie Dene First Nation Elders and community representatives gathered at North American's Calgary office for a naming ceremony. The Elders gave the name Kai Kos Dehseh to our project.

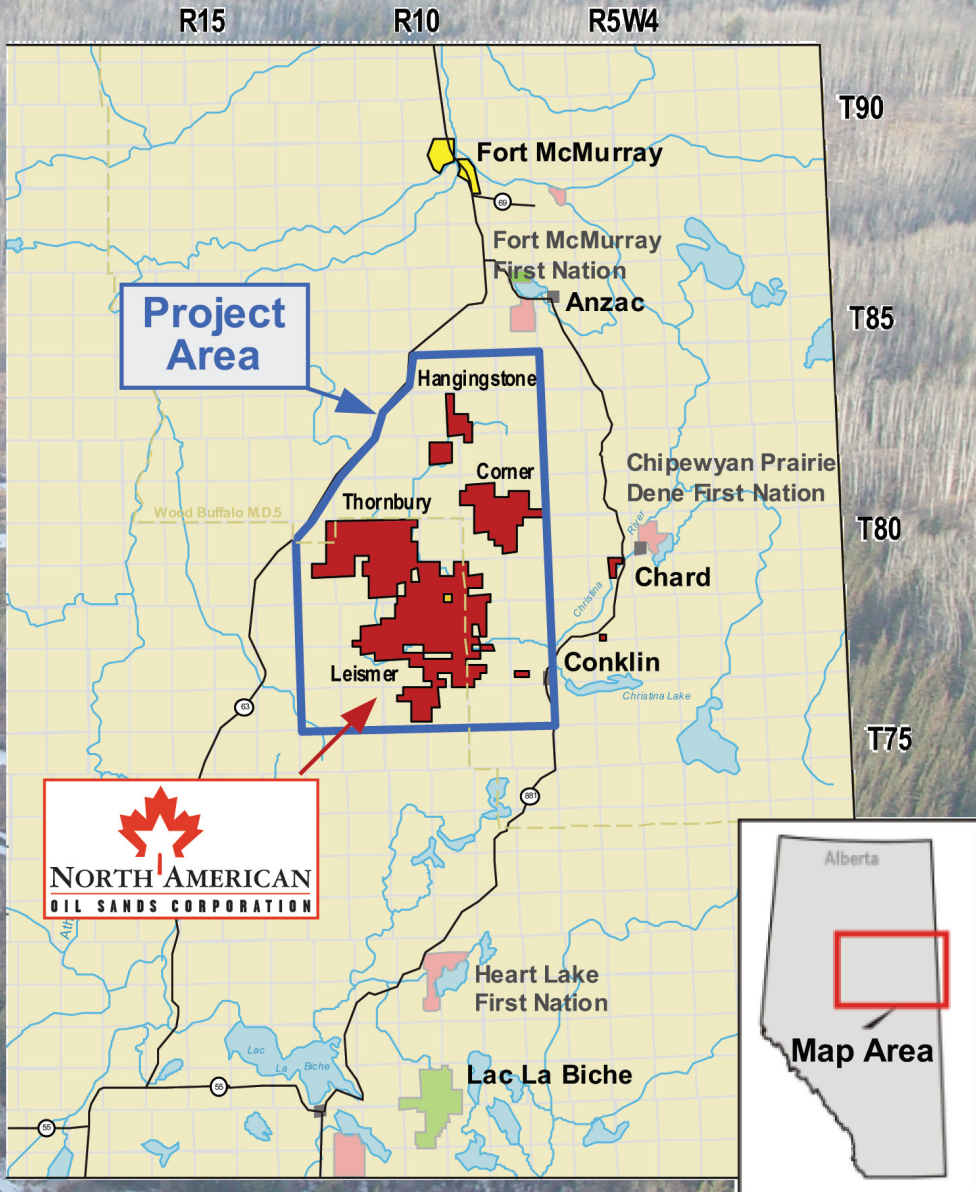
Kai Kos Dehseh (or Red Willow River) is the Chipewyan Prairie Dene name for the river commonly known as the Christina River. Since their childhoods, the Elders

remember that the red willow trees have always grown thick with branches overhanging the banks of the river. In August each year, the red willows produce white berries providing rich nourishment to the animals of the region. One Elder shared with us that he always anticipates seeing a bear on the shore feeding on the berries as his canoe turns the next corner.

To be part of the naming ceremony tradition was a rewarding and meaningful experience for all North American employees. We appreciate the role of Elders in the community, and we were honoured to have a group of Elders name our project.



NORTH AMERICAN OIL SANDS CORPORATION  
LAND HOLDINGS





## THE PROJECT

North American will supply bitumen to the growing global crude oil markets. We have already applied, and are awaiting approval, for the Leismer Demonstration Project, which will produce 1,600 cubic metres (10,000 barrels) per day of bitumen. The Kai Kos Dehseh Project will include expansion of the Leismer Demonstration Project and development of other bitumen resources on North American lands in the area.

We propose to develop our oil sands leases with a staged process. Phase one begins with the Leismer Demonstration Project. The second (commercial) phase consists of developing the Leismer and Corner operating hubs, thereby increasing production by approximately 11,000 cubic metres (70,000 barrels) per day of bitumen. These operating hubs will include central processing facilities, steam assisted gravity drainage (SAGD) wells and additional infrastructure. The Leismer processing facilities hub will be

located adjacent to North American's Leismer Demonstration Project located in Section 2, Township 79, Range 10, W4M. The Corner operating hubs will be located in Section 31, Township 80, Range 8, W4M.

Following these developments, North American expects to expand with a series of added hubs in the Hangingstone, Corner and Thornbury areas for an additional 22,000 cubic metres (140,000 barrels) per day of bitumen.

This disclosure document generally describes the development plans for the project. Although attention has been given to accurately reflect the proposed plans, it must be recognized that circumstances can change which may alter some particular aspects of the proposed development. Any significant changes to the project as described herein will be communicated in a timely fashion.

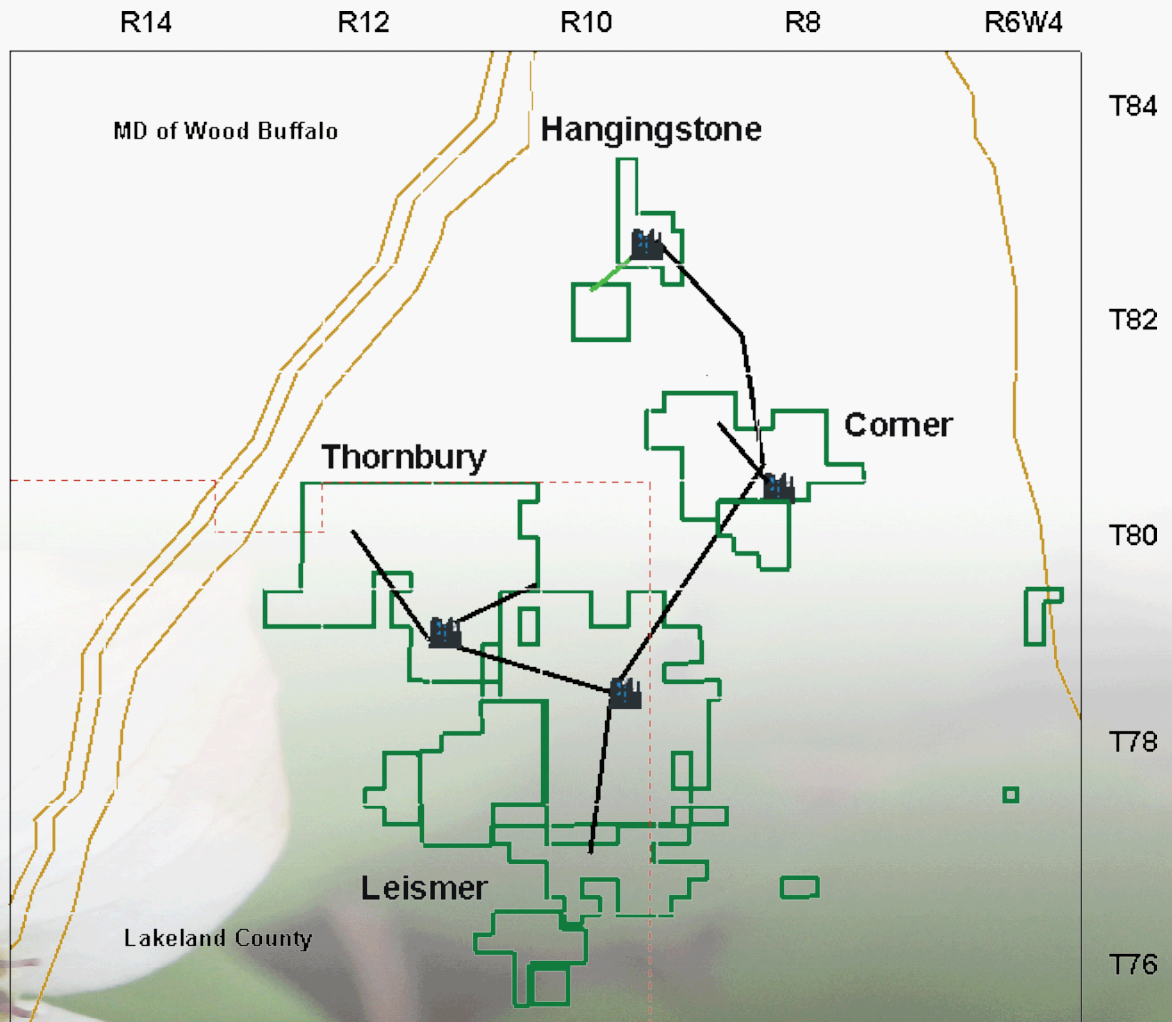
## PROJECT LOCATION

North American's current focus is on four potential operating areas; Leismer, Corner, Hangingstone and Thornbury. The areas are within the Regional Municipalities of Wood Buffalo and Lakeland County, centred about 30 km northwest



of the community of Conklin, between Highways 63 and 881. More specifically, the North American leases are located in Townships 76 to 83, Ranges 8 to 14, west of the 4th Meridian.



NORTH AMERICAN - PROPOSED SAGD DEVELOPMENT  
NOVEMBER 2006



-  North American Lands
-  Existing Oil Pipelines
-  Proposed North American Central Processing Facilities

-  Proposed North American Gathering System
-  Municipal Boundary





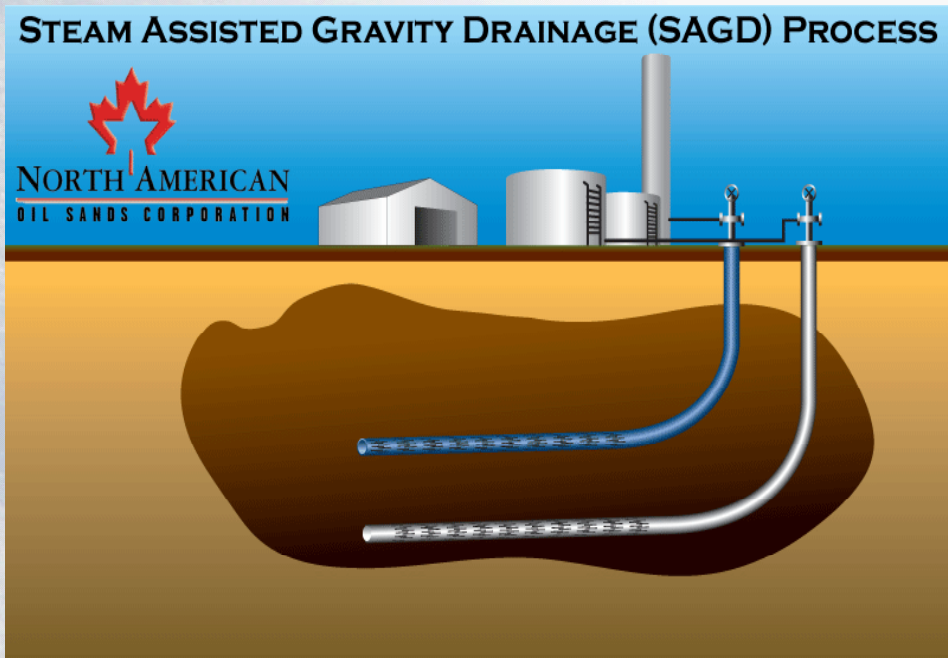


## THE TECHNOLOGY

The overburden thickness to the bitumen bearing resource within the Kai Kos Dehseh Project area is approximately 400 metres, with bitumen bearing reservoir thicknesses ranging from 10 to 35 metres. This type of resource is commercially recoverable using SAGD and related technology; as it is too deep for surface mining.

SAGD involves drilling pairs of horizontal wells. The upper wells are the steam injection wells. The lower (oil produc-

tion) wells are located approximately 5 metres below the injection wells, near the base of the oil pay column. Steam is continuously injected through the upper well bores to melt steam chambers. The heated bitumen then drains to the lower horizontal wells and is then pumped to the surface. Well pads will be designed to accommodate up to 8 well pairs but exact well pair numbers will depend on the reservoir continuity and well bore trajectory requirements. Pads are estimated to be 122 metres x 265 metres in size.



SAGD well pair schematic



# THE PRODUCTION FACILITIES

In addition to the horizontal wells, surface facilities will be required to generate and distribute steam, gather well production, process oil emulsions, and treat water. These facilities can be organized into Field, Hub and Satellite Facilities and Camps as follows:

## Field Facilities (all phases):

- production pads, wells and associated facilities;
- production flowlines;
- steam distribution flowlines;
- electrical power distribution lines;
- pad access roads; and
- water source and disposal, wells, pads, flowlines.

## Satellite Facilities:

- steam generation facilities;
- gas separation facilities;
- electrical, air, water and instrumentation utility systems;
- tankage and support buildings; and
- oil emulsion and treated water flowlines.

## Camps:

### Hub Central Plant Facilities:

- steam generation facilities;
- production treatment (bitumen, water and gas) facilities;
- water source treatment, recycle and disposal facilities;
- electrical, air, water and instrumentation utility systems;
- support buildings including warehouses;
- tankage;
- electrical power distribution line; and
- pipelines (fuel gas, diluent supply, diluted bitumen sales line).

- temporary drilling and construction camps; and
- permanent operations camps.




# THE SCHEDULE

The proposed Kai Kos Dehseh Project schedule is outlined below. Project development timing depends on favourable regulatory timelines and approvals, along with supportive market conditions.

The Project Activity	2007	2008	2009	2010	2011	2015	2020	2021	2025	2030	2035	2039
Demonstration - 10,000 b/d												
Initial Hubs - 70,000 b/d												
Future Development - 140,000 b/d												

**NOTE:**

-  denotes construction activity
- project start dates and duration times are approximate
- background photograph depicts a typical SAGD production facility (not North American's facility)









## THE PEOPLE

North American will provide employment and business opportunities in Alberta starting with engineering and continuing with on-site construction through to the operational phases. This direct employment will in turn generate additional indirect and induced employment in the general economy driven by the workers' personal spending. We will also create ongoing operational employment for 30 years resulting in indirect employment through suppliers and service providers.

We have been consulting stakeholders since the fall of 2004, and this will continue throughout the development process. We will continue to engage the surrounding community throughout the life of the Kai Kos Dehseh Project.

North American will employ industry-best procurement practices to acquire goods

and services necessary for the completion of the work. When cost and quality of goods and services are competitive, North American will give preference to suppliers from the communities nearest the project site. We have developed local and aboriginal procurement policies and programs through ongoing dialogue with surrounding communities, other oil sands operators, all levels of government and the local business community. Our employment and business development strategy will address the evolving needs of aboriginal communities as identified by their representatives.

We are committed to developing creative approaches to employment and business opportunities that respect each community's unique economic, cultural and social requirements.







## THE ENVIRONMENT

North American, in consultation with others, is undertaking a regional environmental impact assessment (EIA) of the Kai Kos Dehseh Project. Part of this assessment includes conducting baseline environmental studies in the area, which are currently taking place. This approach will allow all of our stakeholders to review the existing and long term proposed developments for the North American leases. In 2007, North American will apply to Alberta Environment (AENV) and the Alberta Energy and Utilities Board (AEUB) for project approval. The regional EIA will form part of this application.

North American is taking a structured approach to minimizing the overall land disturbance and environmental impact as a result of the project. Part of this involves the use of horizontal wells and centralized facilities, which help to reduce the land footprint, compared to surface mining. Existing roads and cleared sites will be used wherever possible. Also, we are working with other operators in the area to develop an Integrated Management Plan for the lease areas.

Water requirements for steam generation

will come mainly from brackish sources plus recycled produced water. We anticipate that over 90% of the Kai Kos Dehseh Project's produced water will be recycled. Only minor volumes of fresh groundwater will be required for domestic use at the project hubs and satellite facilities. Deep well water disposal will be utilized for the excess produced water.

We will initially use natural gas as the plant fuel. As natural gas is a clean burning fuel, this will control emissions thereby meeting Alberta regulatory requirements. We will further minimize emissions by installing vapour recovery systems and conserve energy by using the produced gases as fuel.

As a component of a comprehensive plan to environmental assessment, North American is using an innovative approach to studying the impact to caribou, moose and wolf in the area. This non-invasive approach, pioneered by the University of Washington, provides useful information on how to monitor, protect and manage these existing species within the project area.







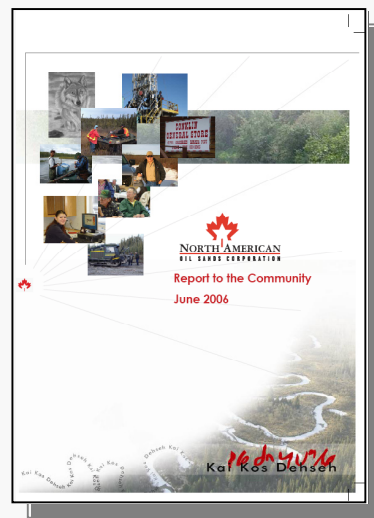
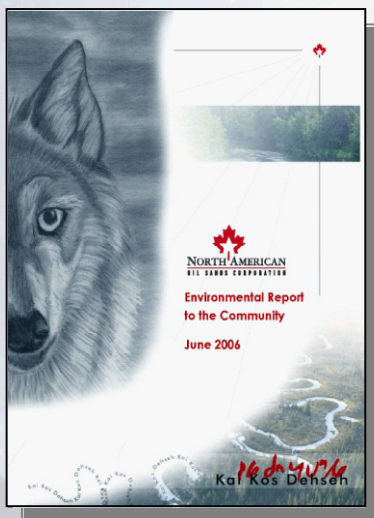
## THE REGULATORY PROCESS

North American chooses to disclose the overall development strategy for the Kai Kos Dehseh Project. This approach allows all parties, particularly all local stakeholders, to understand the total development plan.

In June 2006, we filed a regulatory application for production of our first 10,000 barrels a day of bitumen (Leismer Demonstration). Further applications to the AEUB and AENV for the Leismer and Corner Hubs as part of the Kai Kos Dehseh Project will follow including a regional EIA

report for the overall project. As the Kai Kos Dehseh Project proceeds, amendment applications for the remaining development in the project area will also be filed.

As part of our ongoing consultation with our stakeholders we will provide an annual Environmental Report and Community Engagement Report. These reports will provide local communities and other stakeholders with current knowledge of the company's progress.









# CONTACTS

For further information about the Kai Kos Dehseh SAGD Project please contact:

## **REGULATORY AFFAIRS, ENVIRONMENT & SAFETY**

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