

Blackrod SAGD Commercial Project

December 2011

Project Description

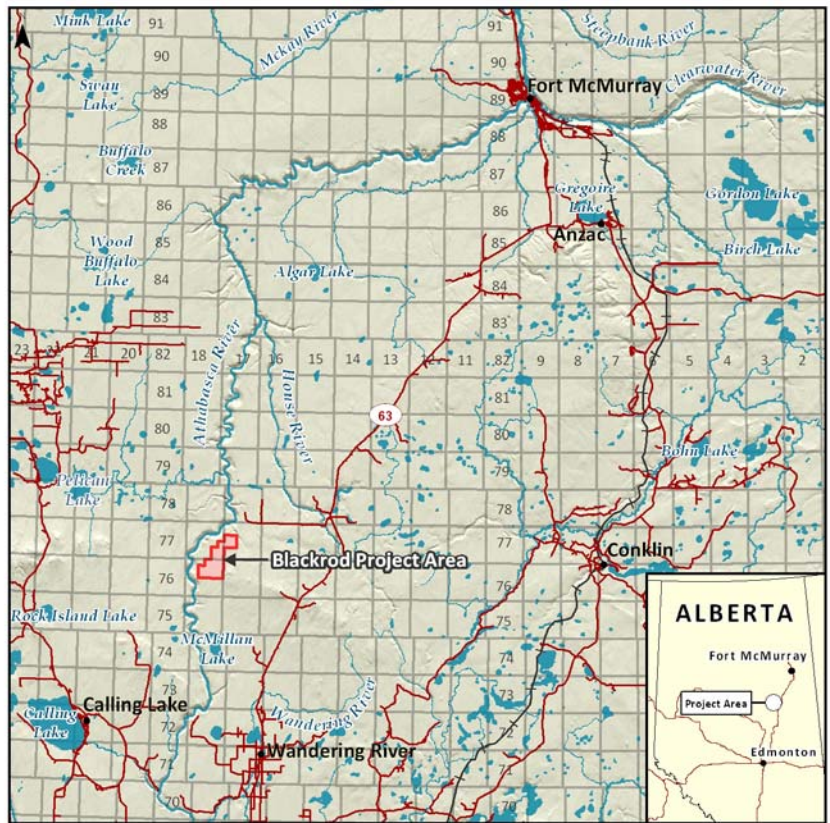
Commercial Project

BlackPearl Resources Inc. (BlackPearl) is seeking regulatory approval for the proposed Blackrod SAGD Commercial Project (Project), an *in situ* Steam-Assisted Gravity Drainage (SAGD) bitumen recovery project in the Lower Grand Rapids Formation.

The proposed project will be developed in three phases over an estimated 30-year period with the initial phase producing 20,000 barrels per day (bbls/d) or 3,180 cubic metres per day (m³/d) of crude bitumen and the second and third phases producing 30,000 bbls/d (4,770 m³/d) each, for a final production capacity of 80,000 bbls/d (12,720 m³/d).

The proposed Project is located on Crown Land on the east side of the Athabasca River in Townships 076 and 077, Ranges 17 and 18, West of the Fourth Meridian (W4M), approximately 50 kilometres northwest of the Hamlet of Wandering River, Alberta.

The proposed Project will require related infrastructure, such as supply pipelines and electrical power, which BlackPearl will apply for separately.



Blackrod SAGD Commercial Project Location

Pilot Project

In October 2010, BlackPearl received approval for the construction, operation and reclamation of the Blackrod SAGD Pilot Project (Pilot Project) in the Lower Grand Rapids Formation. The purpose of the Pilot Project is to demonstrate the feasibility of using SAGD technology to produce oil sands from the formation. The Pilot Project was placed on an existing cleared surface location in the SE quarter-section of 36-76-18 W4M. In June 2011, BlackPearl began operation of the Pilot Project. We are awaiting results.

SAGD Process

What is SAGD?

Steam-assisted gravity drainage (SAGD) is an enhanced oil recovery process that uses steam to soften bitumen deposits deep underground, allowing the bitumen to flow and be pumped to the surface.

Oil sands in the Lower Grand Rapids Formation, where BlackPearl's Oil Sands Lease is located, are deep below the surface. *In situ* methods, such as SAGD, are the only practical way to access these resources.

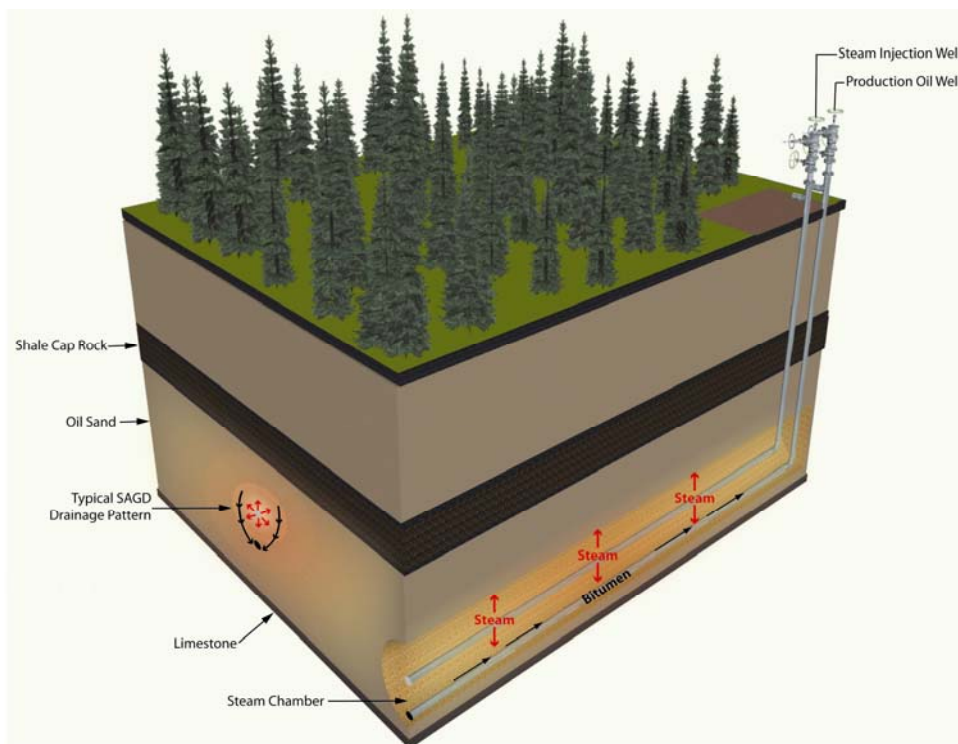
SAGD Process

- Two horizontal wells are drilled, one above the other, approximately five metres apart.
- Steam is injected into the upper well, known as the Steam Injection Well.
- Steam heats the bitumen deposits, softening and liquefying them (*i.e.* reducing viscosity).
- Heated bitumen drains into the lower wellbore, known as the Production Oil Well, and is pumped to the surface and piped to the facility where it is separated and treated.
- Produced water (*i.e.*, water that accumulates after the steam cools and is recovered back to the surface) is recycled and reused for generating new steam.

SAGD Benefits

- No water from the Athabasca River will be used for the Project.
- Only non-drinkable salt water from a deep source will be used in the SAGD process (*i.e.*, no surface water will be used).
- Up to 95% of the produced water that is recovered back to surface along with the oil will be recycled and used again for steam injection.
- No water used for the SAGD process will be discharged to the environment.
- The project footprint will be comparable to conventional oil developments.

Schematic of Blackrod SAGD Process



The steam chamber at Blackrod will be located deep underground, approximately 310 m (1,023 ft) below the surface. The distance underground is more than three regulation sized football fields placed end-to-end.

Blackrod Project

Development Plan

At full development, the Project's facilities and infrastructure will require a surface area of approximately 650 ha to produce bitumen from the reservoir area of approximately 4,660 ha. The Project will be reached from Highway 63 using an existing access road.

Phase 1 will require six well pads and 48 well pairs. At full development, there will be a total of 70 well pads.

The remaining infrastructure for the Project will consist of:

- oil treatment facilities;
- steam production facilities;
- water treatment facilities;
- up to 3 non-drinkable water source wells;
- up to 5 water disposal wells;
- storage tanks;

- central processing facility (CPF);
- office;
- living quarters for operators; and
- connecting pipelines.

Produced Gas

Gas produced as a by-product of the process will be captured and used as fuel within the CPF.



Aerial view of Blackrod SAGD Pilot Project during construction

Environmental Principles

BlackPearl is committed to proactive management of the environmental aspects of our business. Meeting the needs of today without compromising the ability of meeting the needs of tomorrow is integral to our management philosophy. We will strive to mitigate potential environmental impacts associated with our Project through commitment to the following principles:

- Maximize water recycling for steam generation and minimize use of makeup water;
- Protect groundwater resources and surface water quality;
- Minimize Project footprint;
- Minimize Project air emissions; and
- Continually monitor the environment to minimize Project impacts.

Phased Development

The Project will be developed in three phases over an estimated 30-year period with a final production capacity of 80,000 bbls/d (12,720 m³/d) of crude bitumen.

Phase 1

- 20,000 bbls/d (3,180 m³/d) of bitumen production

Phase 2

- 30,000 bbls/d (4,770 m³/d) of bitumen production

Phase 3

- 30,000 bbls/d (4,770 m³/d) of bitumen production

Unique In Its Water Use

BlackPearl will not use fresh water for any makeup water that is required for the Project. We believe the environmental benefits outweigh the extra costs associated with this decision.

Water for steam generation will mainly come from the produced water stream (i.e., water recovered back to surface with the oil production). The majority of the produced water is actually cooled steam that was injected into reservoir. Ninety-five percent of this produced water will be recycled and used again for steam injection.

Any additional water that is required for the project will come from a deep underground non-drinkable salt water source.

Commitment To The Community

Stakeholder & Aboriginal Engagement

Engagement and consultation provides communities and stakeholders potentially affected by the Project with the opportunity to participate in the regulatory process.

BlackPearl is committed to developing and maintaining a constructive dialogue with stakeholders and Aboriginal communities who may wish to learn more about the Project regarding our development plans so we can respond to potential concerns or opportunities associated with the proposed Project.

BlackPearl welcomes the opportunity to work with the differing perspectives of each stakeholder and community that are reflective of their individual cultural heritages and views.

BlackPearl also recognizes the diversity of Aboriginal cultures and the importance of the land. We will continue to work with Aboriginal communities to gather traditional knowledge, identify areas of cultural importance and understand the extent of traditional land use within our Project area.

The objectives of the engagement and consultation program are to foster on-going relationships through the use of effective, transparent communication and mutual respect to ensure the social, environmental and economic sustainability of the Project. BlackPearl's engagement and consultation program is designed to be ongoing throughout the lifespan of the Project.



Small wetland in Project area

Historical Resources

Historical resources in Alberta are protected under the *Historical Resources Act*. In compliance with the Act, BlackPearl will conduct the required Historical Resource Impact Assessment (HRIA) for the Project.

While much of the Project area appears to be comprised of poorly drained wetlands/muskeg and/or uniform, level terrain with low potential for archaeological sites, certain landforms in the Project area possess moderate to high potential for historical resources.

Identified areas of higher potential for archaeological sites will be subject to more detailed assessment including pedestrian survey and, where warranted, shovel testing.



Field crew conducting baseline surveys



Shovel test for HRIA survey

Project Commitments

Project Schedule

The timeline for starting the Project will depend on regulatory approvals, market conditions and company approval. BlackPearl plans to file the Environmental Impact Assessment (EIA) and Project application in Spring 2012 and anticipates an 18 to 24 month regulatory process. We hope to receive regulatory approve by late 2013. Assuming company approval to proceed, the Project will require up to 24 months of construction for each phase.

	2011	2012				2013				2014				2015			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Environmental Impact Assessment																	
Facilities Engineering																	
Regulatory Review																	
Facilities Construction																	
Operations Start																	
Stakeholder & Aboriginal Engagement																	

Environment

As part of the regulatory process, BlackPearl is in the process of preparing an integrated application and comprehensive EIA to assess the environmental and socio-economic impacts associated with the development of the proposed Project. The EIA documents baseline conditions in the study area, local and regional impacts, evaluates cumulative short- and long-term effects and provides monitoring and management plans to mitigate identified adverse effects.

Since 2010, BlackPearl has been collecting regional and local baseline and assessment data. Preliminary baseline studies conducted in the area include assessments of the existing surface and groundwater conditions, air quality, wildlife, soils and vegetation, aquatic ecology, public health, biodiversity, socio-economic effects and historical resources. This is reviewed in relation to the proposed Project to assess and understand the potential impacts the Project may have on the local and regional setting.

Health & Safety

It is the commitment of BlackPearl to conduct its business activities in a manner that ensures the safety of our workers, the public and the sustainability of the environment. It is not enough to just know what we need to do, it is about taking that knowledge and implementing it at every job site each day. No work is so important that it cannot be done safely. BlackPearl's management is committed to this philosophy and strives to achieve excellence in environmental, health and safety performance.

BlackPearl's facilities will incorporate the highest standards in safety, and all site workers will undergo thorough training in safety procedures to protect themselves and the public.



Black Bear (*Ursus americanus*)

Socio-Economics

A qualified team will describe the existing socio-economic conditions in the region, including demographics, infrastructure and services, housing, employment, economy and traditional land and resource use.

The information gathered will be reviewed, as part of Project planning, to gain an understanding of possible effects of this Project on the stakeholders and communities.

This information will be presented in the EIA.

Work Force

BlackPearl will be initiating a search for qualified individuals and services for the construction, operations and ongoing environmental monitoring of the Project. Local hiring will be preferred based on the availability of qualified candidates. BlackPearl looks for individuals and services that display a high degree of integrity and responsibility, positive attitude and competency in their job. Most of these roles are based on the success of the Project moving forward and will not be posted for a minimum of 12 to 18 months.

Profile

BlackPearl Resources Inc. is a heavy oil/oil sands company with operations located in Canada. We have an established track record of developing profitable heavy oil projects. Our operations are concentrated in three core heavy oil areas in Western Canada:

- ◆ Blackrod
- ◆ Mooney
- ◆ Onion Lake

Market Capitalization: \$1.5 billion

Publicly Traded Company on the Toronto Stock Exchange under Trading Symbol -PXX

Management Ownership - 11%

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Core Projects

Blackrod is a planned SAGD development located in the Athabasca oil sands region in northern Alberta. Blackrod is the largest of our three core properties and will require several years to fully develop.

Onion Lake is a conventional heavy oil property located in the Lloydminster area in Saskatchewan. The property also has the potential for thermal development on a portion of the lands. Most of our short-term production growth will occur from conventional development activities at Onion Lake.

Mooney is a conventional heavy oil property located in northern Alberta. The field was initially developed using primary production techniques; however, we are initiating a polymer flood in this area to enhance production and overall oil recovery.

