

# Mackenzie Gas Project



## Taglu Gas Field Development

Discovered by Imperial Oil in 1971, Taglu is estimated to contain three trillion cubic feet of natural gas, or enough to heat all the gas-heated homes in Canada for three years.

The Taglu natural gas field is located in the Mackenzie Delta, approximately 120 kilometres northwest of Inuvik and 70 kilometres west of Tuktoyaktuk. The reservoir is approximately three kilometres beneath the surface. A large portion of the field is located within the Kendall Island Bird Sanctuary. Taglu is 100% held by Imperial Oil Resources Limited.

The Taglu natural gas field is currently the largest onshore gas field in the Mackenzie Delta and is one of the three natural gas fields (anchor fields) proposed for development as part of the Mackenzie Gas Project.



### HOW WILL THE TAGLU NATURAL GAS FIELD BE DEVELOPED?

Facilities will be designed and built in a way that considers the environment and current land uses, while meeting the technical, safety and integrity needs of facilities operating in a northern climate. The preliminary plans have been refined through the process of public consultations with residents in potentially affected communities, and with other interested parties. The results of studies, environmental assessments and public consultations will be considered in the development.

Development of the field will require the drilling of 10 to 15 production wells, and one to two disposal wells. The wells will be directionally drilled from a single surface location, minimizing disturbance of the land.

There will be several stages of development. The first stage will include preparing the site, drilling five to seven production wells and one disposal well, and installing facilities to condition the natural gas. Future stages include installing compression facilities and drilling three to eight more production wells and one more disposal well. Future phases will be situated at the same surface location.

### WHAT PRODUCTION FACILITIES WILL BE REQUIRED AT THE TAGLU GAS FIELD?

- equipment to remove the water from the natural gas before it enters the gathering system (water and natural gas mixed together could form hydrates, a solid ice-like substance that could plug the gathering system)
- one or two wells, to a depth of about one kilometre below the surface, to inject the water removed from the natural gas and other approved wastes
- equipment to cool the gas before it enters the gathering system to maintain the permafrost
- equipment to compress the gas so it will flow through the gathering and pipeline system
- a facility to provide operating staff accommodation, control room and storage
- equipment to generate electricity
- an on-site emergency flare system, required for safety reasons
- a helicopter pad, an airstrip and a dock

The natural gas facilities will be fabricated offsite into large modules, and these modules will be transported from the fabrication yard to the Beaufort Sea, and then through the Kittigazuit Bay and up the Mackenzie River to Taglu. Some equipment, such as fuel tanks and smaller modules, will be fabricated in Western Canada, transported to Hay River by rail or truck, and then barged to Taglu.

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## WHEN WILL DRILLING AND CONSTRUCTION BEGIN AT THE TAGLU NATURAL GAS FIELD?

The timing of the start of construction is subject to regulatory approval. During the first year of construction, the focus will be on the preparation of winter access roads and the transport of camp facilities, storage facilities and materials. Transport of granular material to Taglu from the YaYa River borrow sites and construction of gravel pads and infrastructure would then begin. Drilling will likely begin in the third year of construction and continue for approximately two years. Production of natural gas is expected to begin the fourth year after the start of construction.

## HOW WILL THE TAGLU NATURAL GAS FIELD BE OPERATED?

Control systems to monitor and operate the Taglu facility and wells will be located at the Taglu field as well as at the Inuvik area facility. Each system will be capable of monitoring wells and facilities automatically, displaying operating conditions and alarm messages, and safely shutting down the facility. Initially, it is expected that the Taglu gas field will be operated locally, with operations and maintenance staff located at the facility on a 24-hour basis.

Over time, as experience with the operating reliability is confirmed, the Taglu field may be continuously monitored and controlled from the Inuvik area facility, with only scheduled periodic on-site maintenance and operations support required. Periodic well maintenance will be required using contracted services. The operating life of the Taglu field is about 30 years.

Decommissioning and reclamation plans will be developed in accordance with regulatory requirements.

## HOW WILL IMPERIAL CONTINUE TO KEEP THE COMMUNITY INVOLVED?

Imperial recognizes and respects the desire of northern residents to have an opportunity to participate in, and benefit from, the development of the Taglu natural gas field. We are committed to working with aboriginal and non-aboriginal residents in northern communities.

This includes:

- identifying employment and business opportunities
- working with schools and technical training institutions to help people understand the education needed to position them for career opportunities
- using and populating the Mackenzie Gas Project Human Resources Database

Consultations with local communities are on-going and will continue throughout construction and operations.

## WHAT EMPLOYMENT OPPORTUNITIES WILL BE AVAILABLE?

Development of the Taglu field is expected to create employment opportunities for:

- up to 350 people in short-term positions during the peak construction and drilling activities
- up to 15 people in longer-term positions in facility operations

Additional periodic, short-term positions in facility maintenance and well servicing will be required over the life of the operation.

For more information on the Taglu Gas Field Development or the Mackenzie Gas Project, please visit our website at:

[www.mackenziegasproject.com](http://www.mackenziegasproject.com)

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Example of ocean transport vessel.

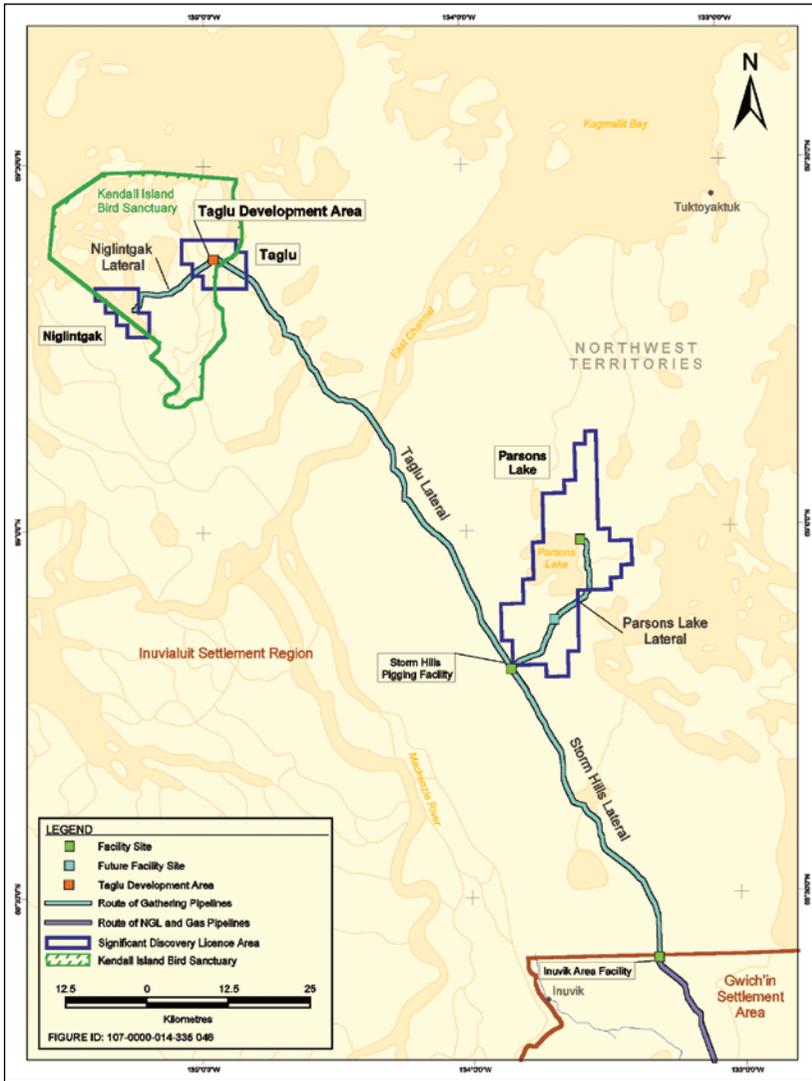


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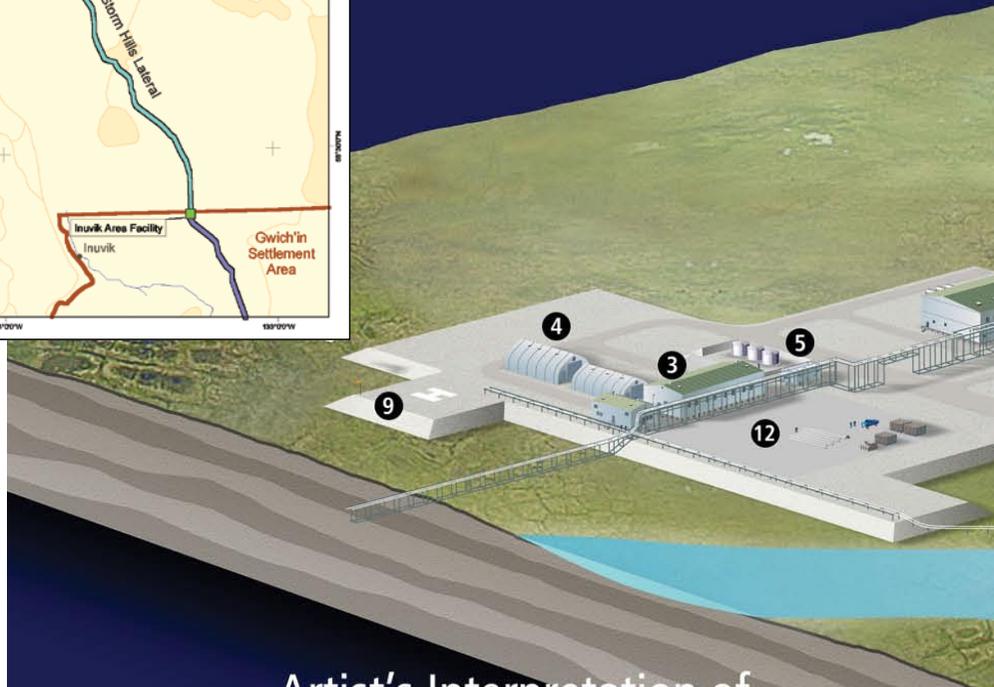
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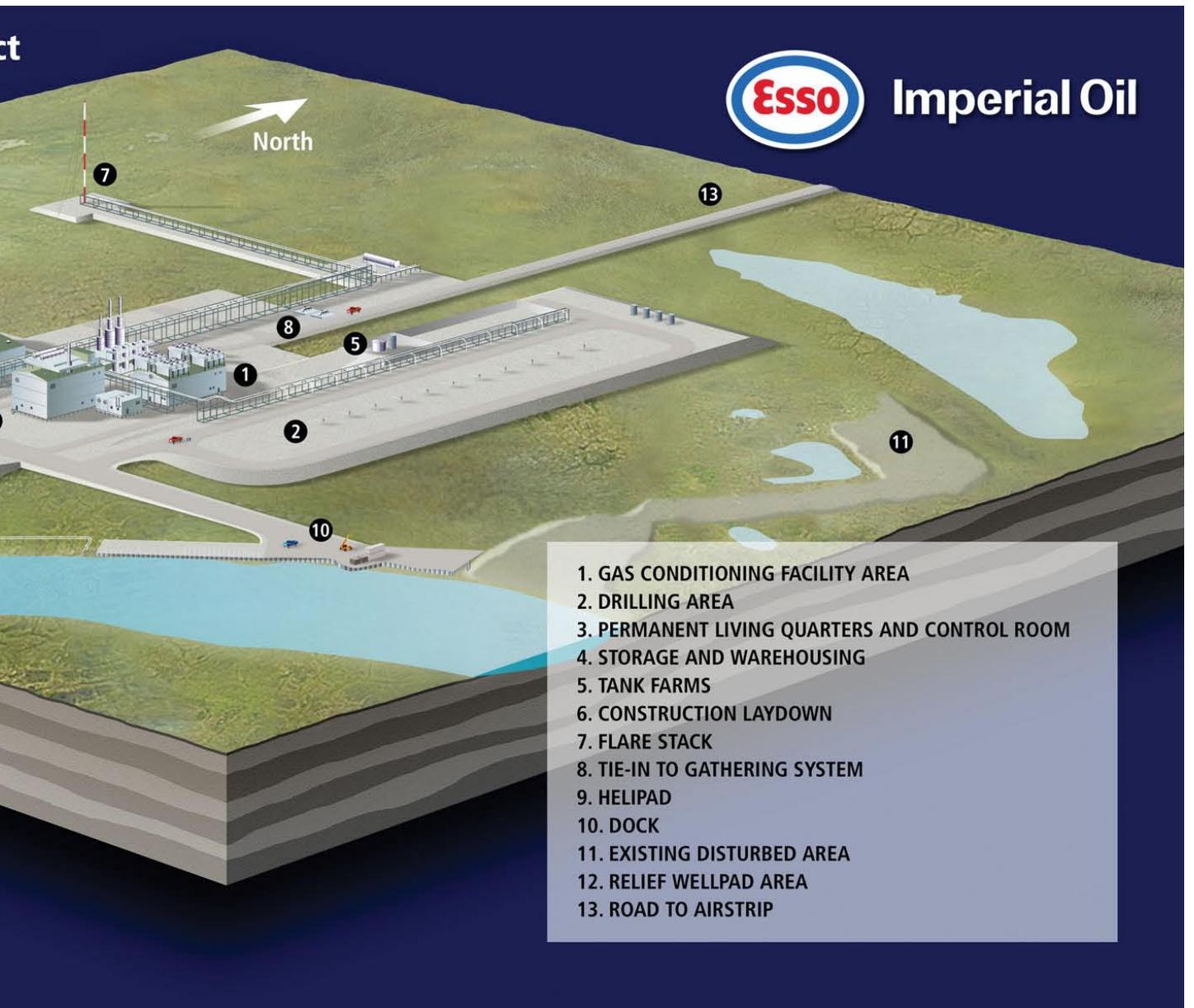
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## Artist's Interpretation of Taglu Processing Facility Operations Phase

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Imperial Oil

- 1. GAS CONDITIONING FACILITY AREA
- 2. DRILLING AREA
- 3. PERMANENT LIVING QUARTERS AND CONTROL ROOM
- 4. STORAGE AND WAREHOUSING
- 5. TANK FARMS
- 6. CONSTRUCTION LAYDOWN
- 7. FLARE STACK
- 8. TIE-IN TO GATHERING SYSTEM
- 9. HELIPAD
- 10. DOCK
- 11. EXISTING DISTURBED AREA
- 12. RELIEF WELLPAD AREA
- 13. ROAD TO AIRSTRIP