

**CONSTRUCTION AND INSTALLATION****APPLICATION FOR APPROVAL
OF THE DEVELOPMENT PLAN FOR
NIGLINTGAK FIELD
PROJECT DESCRIPTION****CONSTRUCTION APPROACH****9.1.1 SCOPE**

This section describes the conceptual strategies and plans for construction and installation of the Niglintgak production facilities. The scope includes infrastructure, logistics, transportation and services for the construction and start-up phases of the Niglintgak development. Physical production assets include well pad facilities, flow lines and gas conditioning facilities. These strategies and plans will become more detailed as the project progresses and will be integrated with the overall Mackenzie Gas Project.

The execution plans include integrating facilities construction with drilling operations activities, wherever feasible (see Section 6, Drilling and Completions, for drilling operations activities). In the current schedule, drilling activities start before completion of all well pad facilities. Well pad design and project execution plans will ensure that these well pad facilities can be constructed while drilling operations are ongoing.

The execution plan highlights the significant differences in construction logistics and infrastructure requirements for different components of the Niglintgak development. For example, the modularized well pad facilities and flow line materials will be shipped via Hay River and assembled on site, whereas the gas conditioning facility will be preassembled off site and towed to Niglintgak via the Beaufort Sea. These logistical differences will be managed within the construction execution plan to ensure that all construction activities are coordinated.

9.1.2 CONSTRUCTION MANAGEMENT PHILOSOPHY

The Niglintgak construction activities will be conducted according to Shell's corporate business principles and policies, including the following:

- Commitment to Sustainable Development
- Health, Safety and Environment Policy
- General Business Principles and Code of Ethics

All contractors will be required to manage their activities according to these principles.

The Niglintgak construction management objectives include the following:

9.1.2 CONSTRUCTION MANAGEMENT PHILOSOPHY (cont'd)

- Pursue the goal of no harm to people.
- Ensure compliance with the law and stipulations stated within regulatory approvals and continually look for ways to reduce the environmental impact of our construction activities.
- Look for appropriate ways to contribute to the general well being of the community.
- Deliver facilities that meet or exceed the requirements of design drawings, codes, specifications and regulatory commitments.
- Develop detailed plans, including contingency plans, to ensure that weather window opportunities are not missed and milestones are achieved.
- Where possible, incorporate industry best practices and Shell global experiences into project design, construction and operations activities.
- Control costs to maintain successful project financial performance.

A systematic approach will be used to ensure that these objectives are met, and to achieve continuous performance improvement.

9.1.3 QUALITY ASSURANCE

The remote location and severe working conditions for the Niglintgak construction activities require additional focus on effective quality assurance in all project activities and project execution phases. The project's Quality Assurance Plan will document the targets, measurement tools, reporting mechanisms and procedures to be used on the Niglintgak development to ensure that critical project success factors are met.

The Niglintgak Quality Assurance Plan will require engineering contractors and suppliers of goods and services to follow recognized industry quality management standards, e.g., ISO 9000. The objective of this Quality Assurance Plan is to ensure that all activities affecting quality are consistently organized and controlled, and effectively managed, implemented and documented. The plan will ensure that:

- all contractors and subcontractors have quality systems to fulfil their contractual obligations and that these systems are integrated with the Quality Assurance Plan
- environmental, safety, and health considerations are adequately incorporated into the design during all project phases

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- design of equipment, material and services complies with specified contract requirements, project specifications and all applicable codes, standards and regulations
 - deficiencies are promptly identified and evaluated, and corrective action is taken
 - quality control procedures and test plans are established, documented and implemented

9.1.4 CONTRACTING STRATEGY

Various types of contracts, such as lump sum, reimbursable and unit rate, will be used on the Niglintgak project.

The contract type and work breakdown structure will be selected to best support the construction objectives and to:

- make the best use of contractor expertise
- place risk where it is best managed
- capitalize on available resources

The current contracting plan is for well designs and drilling activities to be managed within Shell, with specialist contractors providing support in key areas. For the field facilities, an experienced engineering contractor will be selected to perform the engineering design, material procurement and construction planning under the guidance of Shell's Niglintgak project team.

Requests for information packages and prequalification processes will be used for major scopes of work identified in engineering and construction work packages. Bid lists will include qualified Aboriginal and other northern businesses, and will be expanded to include other prequalified northern and Canadian contractors, as determined by Shell.

All contracts awarded will meet the intent and specific requirements of the Canada Benefits Plan and any commitments identified in the specific benefits and land access agreements.

The Niglintgak development will use Inuvialuit, other northern and other Canadian businesses that are able to:

- meet or exceed specified safety, quality and technical standards, as well as the development's timing requirements
- be internationally cost competitive at the point where the goods and services are required

9.1.4 CONTRACTING STRATEGY (cont'd)

- contribute to the development of business and human capacity for the Inuvialuit and other Northern businesses to provide long-term, sustainable benefits to Shell

Where possible, construction and logistics requirements for Niglintgak will be integrated with the Mackenzie Gas Project to take advantage of synergies.

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PROJECT DESCRIPTION****CONSTRUCTION EXECUTION PLAN****9.2.1 PURPOSE**

A Construction Execution Plan will be developed for Niglintgak, to provide the basic management strategy and plans for executing and managing the construction of the field facilities.

The Construction Execution Plan will describe the:

- construction organization
- construction execution schedule
- construction resources
- materials and services
- construction stages
- drilling and completions plan
- transportation and logistics plan
- water and waste management plan

9.2.2 CONSTRUCTION ORGANIZATION

The Niglintgak development will be managed by a Shell project management team to ensure that Shell's requirements are met in all phases of construction. The team will report to the Niglintgak project manager, who will be responsible for all drilling, facilities construction and construction logistics activities for Niglintgak.

The project manager will integrate all aspects of project execution by using a team consisting of:

- project management, drilling and well engineering specialists
- construction, logistics and operations coordinators
- Shell and contract specialists
- safety and environmental coordinators

Construction of the Niglintgak field facilities and associated drilling activities will require significant labour and equipment resources during the 2006 to 2009 construction period (see Section 13.3, Socio-Economic Impacts).

9.2.3 CONSTRUCTION EXECUTION SCHEDULE

The Niglintgak development schedule is based on the Mackenzie Gas Project milestone of delivering first gas to the Mackenzie Valley pipeline by December 2009. To meet this milestone, regulatory approvals must be received in mid-2006 to allow for the three winter construction and drilling seasons required to complete the Niglintgak development.

Niglintgak drilling, well pad facilities and flow line construction will occur primarily in the winter. The current schedule is based on drilling and construction preparation activities starting in the summer of 2006, immediately following regulatory approvals. Niglintgak field construction and drilling activities will start in the first quarter of 2007 and be completed with pre-commissioning in early 2009 and start-up in December 2009 (see the field development schedule in Section 1.4).

Facilities construction and drilling at Niglintgak will occur primarily in the winter. The current schedule is based on drilling and construction preparation activities starting in the winter of 2006–2007. Construction activities will peak during the winters of 2007–2008 and 2008–2009. Commissioning and start-up is scheduled to occur in the second half of 2009, to meet the first gas target of December 2009.

9.2.4 EXISTING FACILITIES

Where feasible, the development will use Shell's existing facility at Camp Farewell, which includes:

- full camp facilities for 35 people
- a sewage treatment system
- storage capabilities for 2 million litres of fuel
- a barge landing site
- a 140 x 200 m storage area
- a 650 m airstrip

Camp Farewell will require some upgrading to prepare it for use to support the Niglintgak drilling and facilities construction activities.

9.2.5 MATERIALS AND SERVICES

9.2.5.1 Materials and Equipment

The major materials and equipment required for Niglintgak construction activities include:

- about 50,000 m³ of granular material
- about 10 prefabricated modules for well pad facilities

- well casing and completion tubulars
- about 10 km of NPS 8 to NPS 12 pipe
- up to 1,500 t of piling and structural steel (for elevated well pad foundations and elevated flow lines)
- temporary construction camps and associated camp support facilities
- construction equipment, including:
 - bulldozers, graders, compactors, gravel trucks and loaders
 - trucks, BobCats and forklifts
 - piling rigs
 - heavy-lift cranes
 - welding equipment
- a gas conditioning facility, including:
 - a steel substructure
 - gas conditioning process modules

Material and service requirements will be defined as engineering progresses, and will be integrated with the overall Mackenzie Gas Project requirements wherever feasible.

Where possible, spares, warehouse space and staging sites will be shared with the other two anchor fields (Parsons Lake and Taglu) and the gathering system construction activities.

9.2.5.2 Construction Services

Specific services required during the construction of the Niglintgak development include:

- granular goods hauling and site placement
- camp management, maintenance and operation for up to 100 personnel
- engineering, procurement and construction management
- development drilling
- marine transportation and potentially dredging
- construction waste management
- materials and personnel transportation
- environmental monitoring
- emergency response
- equipment maintenance
- re-supply of fuel

9.2.6 CONSTRUCTION ACTIVITIES

Construction of the Niglintgak production facilities will occur in stages. The main construction stages and associated activities include:

- gas conditioning facility and well pad module fabrication
- infrastructure and logistics
- site preparation
- pile installation
- gas conditioning facility and well pad module transportation, including site installation
- commissioning

9.2.6.1 Module Fabrication

Well Pad Modules

The well pad modules are planned to be fabricated off site in a module fabrication shop, most likely in Alberta. The modules will be designed so they can be safely transported by truck, rail and barge to the Niglintgak site without exceeding specified size and weight restrictions. About 10 modules will be required to complete the three well pad facilities.

Gas Conditioning Facility

The gas conditioning facility will be fully fabricated and pretested at an off-site fabrication facility. The fabrication facility location will be further evaluated during detailed design for both Canadian and international locations. Construction will begin in 2006, once regulatory approval, equipment layout and process design have been finalized.

Two construction options are being considered for assembling the gas conditioning facility process equipment. These options are to:

- construct the gas processing facilities directly on the steel substructure after the substructure has been completed
- construct the gas processing facility in modules and assemble the modules on the substructure before transportation

Once constructed, the gas conditioning facility will be towed to site around Alaska and through the Beaufort Sea during the summer of 2008.

9.2.6.2 Infrastructure and Logistics

Construction infrastructure requirements for the Niglintgak development include:

- upgrading Camp Farewell for use as a construction supply base and staging area
- constructing required ice roads and ice pads to support winter activities
- constructing camps for the workforce
- shipping required fuel, materials and modules for drilling and construction activities

9.2.6.3 Site Preparation

Site preparation at Niglintgak includes:

- conducting site surveys to identify lease boundaries and layout
- placing gravel, where required
- levelling the gas conditioning facility river location

Niglintgak production facilities require minimal gravel for construction because most of the land-based work involves elevated work platforms and winter construction using ice pads. Currently, the use of gravel is only planned for:

- the well pad flares for permafrost protection during flaring
- the HDD crossing site, if a year-round site is required
- the land site where the gas conditioning facility access bridges connect
- the temporary storage area adjacent to the gas conditioning facility

9.2.6.4 Pile Installation

Most of the production facilities will be elevated on steel piles to provide both flood and permafrost protection. The conceptual design requires piles for several parts of the facilities, including:

- the well pad drilling platform – required for the first quarter of 2007
- the well pad production facilities – required for the first quarter of 2008
- the elevated flow lines – required for the first quarter of 2008
- the gas conditioning facility – required for the third quarter of 2008

Early pile installation is required to support the planned drilling program starting in the first quarter of 2007. If possible, all well pad and flow line piling will be completed in that winter. If necessary, because of logistical efficiency, this program might extend into the 2008 winter season.

Pile material will be shipped by barge during the summer and stockpiled at Camp Farewell until needed the following winter. Piles will be drilled and frozen in place. The piles for the gas conditioning facility will be completed when the gas conditioning facility is in place.

9.2.6.5 Transportation and Site Installation

Well Pad Module Installation

Well pad modules will be shipped from the module fabrication site by rail or truck to Hay River, transported by barge to Camp Farewell in the summer of 2008, and transported by truck over an ice road to the site during the first quarter of 2009. An alternative being considered is to transport the modules directly from the fabrication shop to Niglintgak by truck in the winter via an ice road.

The well pad modules will be set on previously installed steel piles. Field construction activities will include installation of interconnection piping, electrical and control cabling, heat tracing, insulation, and decking between modules.

Flow Line Installation

The elevated field flow line design will require field installation of both the insulated steel flow lines and the associated fuel, power and communication cables required in the design. Flow line materials will be shipped via barge to Camp Farewell during the summers of 2007 and 2008, for winter installation in 2008 or 2009.

The Kumak Channel HDD river crossing will be bored during the winter of either 2008 or 2009, using temporary ice pads for most of the required work space. HDD activities will be coordinated to the extent possible with the gathering system river crossing activities.

Gas Conditioning Facility Installation

Construction of the gas conditioning facility will be complete in early 2008, to be ready for towing from the construction yard through the Beaufort Sea to the Niglintgak site during the summer of 2008.

Any dredging required for either gas conditioning facility transportation or the setdown site will be done during the summers of 2007 and 2008. Bottom dredging will likely be required at the Niglintgak gas conditioning facility location to ensure a uniform river bottom profile before final setdown. The dredging plan will be finalized during ongoing engineering work, using additional bathymetric data to further understand the quantity and duration of any dredging required.

Following grounding of the gas conditioning facility, final site work will be completed, including:

- foundation piling
- installing access bridges from the gas conditioning facility to the land
- connecting flow lines to the well pads and gas conditioning facility

Much of the construction activity will occur in winter and will require the use of temporary workplace lighting equipment.

9.2.6.6 Commissioning

The gas conditioning facility will be precommissioned before being towed to the site. Commissioning activities for the production facilities will begin in late 2008 and will include:

- checking out equipment after it has been towed to the site
- loading required consumable supplies for process and utility equipment
- inspecting and checking equipment and control systems

Following commissioning, the facilities will be handed over to operations for start-up.

9.2.7 DRILLING AND COMPLETIONS

Construction of the required drilling pads is included in the well pad construction execution plan. Drilling and completions operations will be fully integrated with the ongoing construction activities.

The drilling pads will be constructed during the first winter season following development approval. The steel decking and piles for the pads, and critical equipment required for ice road construction and early pad construction operations, will be transported by barge and staged at Camp Farewell during the preceding barge season (summer 2006).

A supplemental ice pad area will be constructed adjacent to each drilling site to accommodate the drilling camp and a small area for equipment storage. A temporary airstrip will also be constructed on the river channel adjacent to the drilling site to support drilling operations. The drilling rig, equipment and camp will be transported by truck to the well pad as soon as ice road conditions permit. At the end of each winter drilling season, the drilling equipment and camp will be demobilized to Camp Farewell or other areas.

Camp Farewell will be used as a support base and camp for summer well completion operations. Supplies and completion equipment will be stockpiled on the steel well pad decking before spring breakup of the ice roads. Transportation for summer completion operations will be provided by barge to the Niglintgak area, and by helicopter from the barge to the well pad deck.

For further information on drilling and completions operations, see Section 6, Drilling and Completions.

9.2.8 TRANSPORTATION AND LOGISTICS

Transportation requirements for the project will be highest during the peak construction and drilling years between project approval in 2006 and start-up in late 2009. Transportation and logistics management will be integrated with the rest of the Mackenzie Gas Project activities to reduce potential problems with transportation shortages and logistical constraints.

9.2.8 TRANSPORTATION AND LOGISTICS (cont'd)

The Niglintgak development will use several transportation options during drilling and construction activities, including:

- barges
- helicopter and fixed-wing aircraft
- trains
- trucks and other road vehicles

The current construction and drilling plan will use a combination of these transportation options for transporting material, equipment and personnel for:

- the well pad, flow line and drilling materials and equipment
- drilling and construction
- the gas conditioning facility

9.2.8.1 Material and Equipment Transportation**Well Pad, Flow Lines and Drilling**

The proximity of Niglintgak and Camp Farewell to navigable channels makes the use of barges for transporting material and equipment a cost-effective option to supplement transportation by ice roads. Major drilling, well site and flow line material and equipment for Niglintgak will be transported either to Shell's existing Camp Farewell for staging or storage, or directly to Niglintgak. Most material and equipment, excluding the gas conditioning facility, will be transported:

- by barge from Hay River in summer
- by truck via the Dempster Highway and via ice roads in winter

Consumable supplies, including contingency supplies and some drilling equipment, will be transported by barge to Camp Farewell each summer to supply construction and operations activities planned for the following winter season. A barge landing site is already in place at Camp Farewell. Some small items might be transported to Camp Farewell year-round by helicopter or small fixed-wing aircraft.

Ice roads from Inuvik to Camp Farewell and to specific Niglintgak well pad locations will be built during each of the winter construction or drilling seasons. Where possible, the construction and use of these ice roads will be integrated with the requirements of the Mackenzie Gas Project and other area activities. Equipment not shipped by barge will be moved to Niglintgak via the ice roads in the winter or, for smaller items, by helicopter in the summer.

Gas Conditioning Facility

Ocean-going tugs will be used to bring the gas conditioning facility from its fabrication location along the northern Alaska coastline to the Mackenzie Delta

area. Because of the seasonal ice conditions in the Beaufort Sea, the gas conditioning facility will likely be moved in the late summer of 2008.

Two areas of complexity associated with the transportation of the gas conditioning facility to Niglintgak are:

- the short ice-free period through the Beaufort Sea, in particular, the area surrounding Point Barrow
- the selection of the optimum route through the relatively shallow and narrow Mackenzie Delta channels, to eliminate or reduce dredging requirements

The transportation route around Point Barrow, along the North Slope of Alaska, and then into the Canadian Beaufort Sea is well known for the ice-related challenges that it can pose. By mid to late August, a band of open water from 50 km to 100 km wide, which might contain some areas of low to moderate ice concentration conditions, normally stretches from the Alaskan coastline to the southern edge of the polar pack. However, the timing, duration and reliability of the access route is variable because of the presence of shifting ice cover. As a result, transportation around Point Barrow will be well planned to accommodate the range of ice conditions that can be encountered in any given year. Despite the difficulties, a large number of vessel transit, structure mobilization and sealift operations involving ocean tows have been successfully accomplished across this region over the past few decades.

The development plan calls for the Niglintgak gas conditioning facility to be waiting for ice breakup off Alaska by late July in the year of transport. The gas conditioning facility will then be towed around Point Barrow and into the Beaufort Sea, most likely arriving at the mouth of the Mackenzie River in early August. The ocean tow itself should take only one week, although waiting on the right weather and ice conditions for transport could take several weeks.

The current plan is to transport the gas conditioning facility from the fabrication yard to the Niglintgak site as a wet tow. A dry tow, with the gas conditioning facility carried on another vessel for the ocean tow, is also being considered. The exact Beaufort tow route and tow method will be finalized as engineering design progresses.

The gas conditioning facility will likely arrive at the mouth of the Mackenzie River by early August. River tugs will then tow it to the Niglintgak site sometime during August or September. The exact timing will depend on water levels and weather at the time of the tow. If dredging is required on the chosen route, it will be carried out in the weeks before the barge reaches the river mouth.

Desktop studies have been done on the following three identified access routes from the Beaufort Sea to the Niglintgak site (see Figure 9-1), using data from navigational charts, surveys and water-level monitors:

- Kittigazuit
- Garry Island
- Shallow Bay

Gas Conditioning Facility (cont'd)

Additional bathymetric information on two of these routes was obtained in the summer of 2004 to help evaluate the routes further. This information will be used to finalize the route, and identify any dredging or additional buoyancy requirements.

Currently, Kittigazuit is the preferred route, because it is the existing shipping route and, if dredging was required, it would widen or lengthen the existing channel to the advantage of all shipping in the area. However, the Garry Island route is more direct, shorter and is outside the Beluga Management Zone 1A, which must be crossed in the Kittigazuit route. Community consultation has identified concerns about transportation through the Beluga Management Zone 1A, particularly if dredging is required.

The Shallow Bay option was not pursued because it had no advantages over the other routes. Further information on the remaining routes was gathered in a multi-beam swath bathymetry survey carried out in summer 2004. The final route will be selected based on a number of criteria, including:

- the quantity (depth, width and length) of any dredging required
- the directness of the route
- the potential dredging time
- the location of the dredging
- the proximity to the Beluga Management Zone 1A
- community input

Preparation of the final river location for the gas conditioning facility will likely involve a small amount of dredging at the set-down site, to create a suitable surface profile. The extent of this will also be confirmed with data from the summer 2004 multi-beam swath bathymetry survey. The gas conditioning facility will be grounded at the set-down site, using water ballast, and secured in place using a permanent steel pile foundation. The gas conditioning facility is planned to be in place to allow commissioning to take place in the autumn of 2008.

9.2.8.2 Drilling and Construction Personnel Transportation

Drilling and construction personnel from outside the Inuvik area will be transported to Inuvik by commercial airline or charter aircraft. Personnel will then be transported from Inuvik to Camp Farewell and the construction and drilling camps by:

- fixed-wing aircraft to both Camp Farewell and the Niglintgak ice strip
- helicopter
- ground transportation via ice roads from Inuvik

Drilling and construction personnel based in Camp Farewell during the winter construction period will be transported daily to Niglintgak.

9.2.9 WATER AND WASTE MANAGEMENT**9.2.9.1 Construction Water Management**

Water sources for construction work will vary, based on each construction activity's quality and quantity needs, and will be finalized during ongoing engineering design activities. Water sources being considered include:

- the Mackenzie River
- local lakes
- local municipalities

Potable water will be treated for domestic use, except for drinking water, which will be transported to site. Water supply for the facilities construction and drilling activities will be managed through the project's Water Management Plan.

9.2.9.2 Construction Waste Management

The primary wastes expected to be generated are:

- shipping crate, wooden pallet and packaging debris
- piping and structural steel cuttings, and welding consumables debris
- sewage
- lubricating oils and grease from routine equipment maintenance

All waste generated during construction and installation will be treated on site, if possible, or stored on site, then transported to suitable waste handling sites. Camp wastes will be incinerated on site as much as possible. The Niglintgak Waste Management Plan will address all waste sources from construction activities and outline how each will be managed to meet regulatory requirements.

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Construction and drilling camp facilities will be required at Niglintgak to support drilling and construction activities occurring between 2006 and 2009. These camp requirements include using:

- portable drilling camps for each winter drilling season
- Camp Farewell for early facilities construction activities and additional camp space, if required
- a barge-based or land-based camp for facilities construction activities

Each camp will include:

- sleeping units
- lavatory and shower facilities
- kitchens
- dining areas
- recreational facilities
- first-aid stations

Each camp will also require:

- water treatment facilities
- sewage and waste handling facilities
- offices
- storage facilities
- generator sets
- communication systems

Camp requirements will be further defined as construction planning progresses.

9.3.1.1 Drilling Camps

A portable drilling camp will be established each winter on an ice pad adjacent to each drilling site at Niglintgak. The location, schedule and type of work will likely require separate drilling camps from those supporting other field construction activities. The camp will accommodate about 70 people for one-rig

9.3.1.1 Drilling Camps (cont'd)

operations or 100 people for two-rig operations. These land-based portable drilling camp modules will be removed each spring before breakup.

Shell's Camp Farewell will be used as a support base for drilling and well pad construction operations and provide additional camp facilities, if required.

9.3.1.2 Camp Farewell

Camp Farewell currently has capacity for 35 workers and will be expanded if additional space is required. The facility includes a 650-m-long airstrip that will be used for aircraft transporting both materials and construction personnel. Workers will be transported daily by ice road from Camp Farewell to the Niglintgak construction site.

Camp Farewell will provide additional camp capacity for drilling and facilities construction activities. This facility will also be the prime support base for both summer and early facilities construction activities, which might include:

- well pad site preparation
- summer well completions
- well pad and flow line piling
- flow line HDD activities
- gas conditioning facility transportation and dredging activities

Camp Farewell would require upgrading to prepare it for use to support the Niglintgak drilling and facilities construction activities. Integration of Niglintgak camp requirements with the overall Mackenzie Gas Project will be evaluated as execution plans are finalized.

9.3.1.3 Facilities Construction Camp

The facilities construction camp will accommodate an estimated peak construction workforce of about 100 people in early 2008 and 2009, including:

- construction supervisors
- camp support staff
- inspectors
- tradespeople and general construction workers
- owner representatives

Options being considered for the location of the camp include:

- adding camp facilities at Camp Farewell
- using a barge-based or land-based camp near the Niglintgak gas conditioning facility

The facilities construction camp location will be finalized as construction planning progresses.

9.3.2 STAGING AND STOCKPILE SITES

The primary staging and stockpile location for Niglintgak will likely be at Camp Farewell. Additional storage required for drilling and construction activities at Niglintgak include:

- a 100 x 100 m area at each well pad
- a 150 x 100 m storage site at the gas conditioning facility

These storage sites will be used primarily for short-term storage. At the end of each construction season, most stored items will be relocated to Camp Farewell. The well pad steel deck and gas conditioning facility storage site will be used to stockpile any equipment remaining at the Niglintgak site over the summer period.

Fuel for the Niglintgak construction and drilling activities will be stored primarily at Camp Farewell and transported to the site by truck, as required. Camp Farewell has permanent bermed tank facilities for 2 million litres of fuel storage. Additional temporary onsite fuel storage at the Niglintgak site will be required for drilling and construction support.

9.3.3 GRANULAR RESOURCES

Niglintgak is expected to require minor amounts of borrow materials (estimated at 50,000 m³) for well pad flare, temporary storage sites and access bridge construction. All material is expected to be sourced from the Ya Ya borrow site near Niglintgak during the first quarter of 2007. Borrow site management and transportation will be fully integrated with the Mackenzie Gas Project.

