



September 5, 2006

NWT Water Board  
2nd Floor Goga Cho Building  
4916 47th Street  
P.O. Box 1500  
Yellowknife NT X1A 2N1

Attention: **Gordon Wray**  
Chair



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Shell Canada Limited  
400 - 4th Avenue S.W.  
P.O. Box 100, Station M  
Calgary, Alberta T2P 2H5  
Tel (403) 691-3111  
Internet www.shell.ca

**RE: Applications for a Class 'B' Water Licence  
Proposed Niglintgak Natural Gas Field Development  
2006/2007 Winter Field Program**

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Dear Mr. Wray:

Please find under this cover, with regard to Shell Canada Limited's proposed 2006/2007 Winter Field Program the following:

1. An Application for a Class B Water licence (the Application)
2. As requested by the NWT Water Board, a Water Licence Questionnaire for Oil and Gas: Seismic (Questionnaire)
3. Twenty-four (24) hard copies of the Project Description for the Proposed Niglintgak Natural Gas Field Development 2006/2007 Winter Field Program (Project Description)
4. One (1) hard copy of Shell Canada's Emergency Response Plan
5. One electronic copy on CD of the Project Description and the Application
6. A cheque for the applicable application fee and the first year of water use.

This Application and Questionnaire contain both direct responses to the questions in the Application form as well as references to the appropriate sections of the Project Description where an extensive response is required.

Should you have any questions, please do not hesitate to contact me at (403) 691-4396, fax (403) 691-4850 or by e-mail ([B.Seligman@shell.com](mailto:B.Seligman@shell.com)).

Sincerely,

Ben Seligman  
Project Integration Coordinator  
Shell Canada Limited

SCHEDULE III  
(Subsection 6(1))

APPLICATION FOR LICENCE, AMENDMENT OF LICENCE, OR RENEWAL OF LICENCE

APPLICATION/LICENCE NO:  
(amendment or renewal only)

1. NAME AND MAILING ADDRESS OF APPLICANT

Ben Seligman  
Project Integration Coordinator  
Shell Canada  
400-4th Avenue S.W.  
P.O. Box 100, Station M  
Calgary AB T2P 2H5

TELEPHONE: (403) 691-4396  
FAX: (403) 691-4850

2. ADDRESS OF HEAD OFFICE IN CANADA IF INCORPORATED

Shell Canada  
400-4th Avenue S.W.  
P.O. Box 100, Station M  
Calgary AB T2P 2H5

TELEPHONE: (403) 691-3111  
FAX:

3. LOCATION OF UNDERTAKING (describe and attach a map, indicating watercourses and location of any proposed waste deposits)

The work related to the 2006/2007 winter field program is located at the Niglintgak field development area, Camp Farewell, Kittigazuit Bay and within the Hamlet of Tuktoyaktuk. The water licence is required only for the activities at the Niglintgak development area.

- The approximate coordinates of Niglintgak field are:  
UTM (NAD 83)7689019.19 N, 489653.35 E (69° 18' 32.2" N, 135° 15' 44.7" W).
- Detailed information can be found in the following section of the attached *Project Description for the Proposed Niglintgak Natural Gas Field Development 2006/2007 Winter Field Program* (Project Description):
  - Location can be found on Figure 4-1
  - Watercourses can be found on Figure 4-1 and 4-2
  - Further detailed information can be found in Section 4.0 - Location.

4. DESCRIPTION OF UNDERTAKING (describe and attach plans)

Shell is proposing to continue fieldwork related to the development of the Niglintgak natural gas field. The proposed 2006/2007 winter fieldwork is a continuation and expansion of previous years' fieldwork. These studies and a synthesis of existing technical information are being used to develop a suitable knowledge base for project planning, assessment of impacts, and development of environmental protection plans. The 2006/2007 winter field program will also provide Shell the opportunity to test some

detailed engineering and design related to the Niglntgak development.

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5. TYPE OF UNDERTAKING

- 1. Industrial
- 2. Mining and milling
- 3. Municipal
- 4. Power
- 5. Agriculture
- 6. Conservation
- 7. Recreation
- 8. Miscellaneous (describe) \_\_\_\_\_  
\_\_\_\_\_

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6. WATER USE

- To obtain water  Flood control
- To cross a watercourse
- To divert water
- To modify the bed or bank of a watercourse
- To alter the flow of, or store, water

Other (describe) \_\_\_\_\_

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7. QUANTITY OF WATER INVOLVED (litres per second, litres per day or cubic metres per year, including both quantity to be used and quality to be returned to source)

All potable water will be brought from Inuvik for camp use at Camp Farewell. Other water needs will be taken from Middle Channel under the existing Camp Farewell Water Licence (Licence # N7L1-1762).

At Niglntgak, water required for the combination geotechnical drill rig is less than 3 m<sup>3</sup> per day and will be withdrawn from Kumak Channel at the Niglntgak site.

There may be approximately 3 km of winter site roads constructed at Niglntgak to access the geotechnical drilling locations (Figure 4-2 of the attached Project Description). If required, approximately 1,800 m of these site roads will be overland and 1,300 m over water and will be constructed using water withdrawn from Kumak Channel. Approximately 600 m<sup>3</sup> in total will be required for the over land portions of the ice road construction. Daily withdrawal will not exceed 300 m<sup>3</sup>/day, which is the maximum allowed under a Type B Water Licence.

Water for the construction of the ice road from Tununuk Point to Niglntgak will be withdrawn from the Middle Channel of the Mackenzie River.

Water withdrawn from the Mackenzie River will be screened with 2.54 mm fine mesh to prevent entrainment of fish, in

accordance with the Department of Fisheries and Oceans Freshwater Intake End-of-Pipe Fish Screen Guideline (1995).

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8. WASTE DEPOSITED (quantity, quality, treatment and disposal)

All waste from the Niglintgak site will be collected and transported to Camp Farewell. Solid waste from both Niglintgak and Camp Farewell will be either incinerated or stored for transportation to Inuvik and disposal in the Inuvik landfill. If applicable, camp kitchen waste that cannot be incinerated will be stored at Camp Farewell in animal-proof containers for shipment to Inuvik. Sewage and greywater will be collected and transported to Inuvik for treatment at the sewage treatment lagoon.

It is anticipated that 7,000 kg of camp waste, 170 m<sup>3</sup> of greywater, 40 m<sup>3</sup> of sewage and approximately 10 m<sup>3</sup> of drill mud associated with the geotechnical air/mud rotary rig will be generated during the program.

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9. OTHER PERSONS OR PROPERTIES AFFECTED BY THIS UNDERTAKING (give name, mailing address and location; attach list if necessary)

- None.
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10. PREDICTED ENVIRONMENTAL IMPACTS OF UNDERTAKING AND PROPOSED MITIGATION

- Detailed information can be found in the following sections of the attached Project Description
    - Section 12.0 Potential Environmental Effects, Mitigation and Residual Effects
    - Section 13.0 Cumulative Effects
    - Section 17.0 Other Environmental Assessment
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11. CONTRACTOR AND SUB-CONTRACTORS (names, addresses and functions)

- To be determined after regulatory approval.
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12. STUDIES UNDERTAKEN TO DATE (attach list if necessary)

- Detailed information can be found in the following sections of the attached Project Description:
    - Section 11.0 Environmental Overview
    - Section 12.0 Potential Environmental Effects, Mitigation and Residual Effects
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13. PROPOSED TIME SCHEDULE

Project Activity	Estimated Time Frame <sup>1</sup>	Estimated Field Time (Days) <sup>1</sup>
<b>Niglntgak Field Development Area</b>		
Ice Road Construction and Maintenance	January-March	60
Geotechnical Survey	February-March	15
Sediment Sampling	February-March	5
Gas Conditioning Facility Test Pit Excavation and Foundation Installation	February-March	15
GCF Installation Test Pit Material Disposal	Late March	15
Benchmark Installation	March	5
GPR Niglntgak Island Stockpile Approach	Mid to Late March	2
Peak Water Level Monitoring	May During Spring Break-up	N/A
Test Pit Monitoring	Spring –Summer 2007 and Beyond.	N/A
Notes: 1. The estimated time frame and the amount of time spent in the field is approximate and is contingent on weather and other factors.		

B.J. SELIGMAN      B.J. Seligman      11 September 2006  
 NAME (Print) TITLE (Print) SIGNATURE DATE

Ben Seligman, Project Integration Coordinator

**FOR OFFICE USE ONLY**

APPLICATION FEE Amount: \$ \_\_\_\_\_ Receipt No.: \_\_\_\_\_

WATER USE DEPOSIT Amount: \$ \_\_\_\_\_ Receipt No.: \_\_\_\_\_