



**SAHTU Land and Water Board
Land Use Permit Application**

Mackenzie Valley Land Use Regulations SCHEDULE 2

Information In Support of an Application for a Land Use Permit

New Application

Amendment

<p>1. Applicant's name and mailing address Husky Oil Operations Limited Box 6525, Station D Calgary, Alberta T2P 3G7</p> <p align="right">Attn: Kim Richardson</p>	<p>Fax no. (403) 750-1365</p> <hr/> <p>Telephone no. (403) 298-7273</p>								
<p>2. Head office address</p> <p>As above</p> <p>Field Supervisor To be determined</p>	<p>Fax no. TBA</p> <hr/> <p>Telephone no. TBA</p> <hr/> <p>Radiotelephone no. TBA</p>								
<p>3. Other personnel (subcontractor, contractors, company staff etc.)</p> <table border="0"> <tr> <td>Shallow Drilling Rig Contractor</td> <td>To be determined</td> </tr> <tr> <td>Bedrock Drilling Rig Contractor</td> <td>To be determined</td> </tr> <tr> <td>Consulting Services</td> <td>To be determined</td> </tr> <tr> <td>Wireline Logging Services</td> <td>To be determined</td> </tr> </table> <p>Total number of persons on site: 11</p> <p>For this LUP, it is assumed that drilling and consulting personnel will be accommodated in a camp that is co-located with the construction crew base Camp and operated under the access and camp operations LUP S11T-002 and WL S11L3-002.</p>		Shallow Drilling Rig Contractor	To be determined	Bedrock Drilling Rig Contractor	To be determined	Consulting Services	To be determined	Wireline Logging Services	To be determined
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<p>4. Eligibility (Refer to section 18 of the Mackenzie Valley Land Use Regulations.)</p> <p>(a)(i) <input checked="" type="checkbox"/> (a)(ii) <input type="checkbox"/> (a)(iii) <input type="checkbox"/> (b)(i) <input type="checkbox"/> (b)(ii) <input type="checkbox"/></p>									

5. a) Summary of operation (describe purpose, nature and location of all activities)
(Refer to paragraph 19(3)(b) of the Mackenzie Valley Land Use Regulations.)

The proposed groundwater investigation program consists of the drilling of up to 20 shallow boreholes and a deep program with 5 locations having up to 3 deep boreholes (150 meters) per location to assess the baseline conditions of shallow surficial groundwater aquifers and deeper bedrock aquifers.

The shallow investigation will utilize a track/truck mounted auger drilling rig to a maximum depth of 30m. Where water is encountered, a monitoring well will be installed and the aquifer will be tested for productivity. Water samples will be obtained and submitted to an accredited lab for analysis of baseline chemical parameters. Thermistors will be installed in an adjacent borehole at some monitoring well locations to monitor permafrost.

The bedrock aquifer investigation will utilize an air/water/mud rotary drilling rig to assess aquifers to a maximum depth of 150m. Boreholes will be assessed with wireline logging tools. Potentially productive zones will be identified and the borehole will be completed with screens and steel casing. Water samples will be obtained and submitted to an accredited lab for analysis of baseline chemical parameters. Potentially productive zones of freshwater will be tested for productivity. Water produced during testing will be contained in storage tanks and, after testing will be released to the land. Wells will be left in place for future monitoring and/or as a source of water for future industrial activity. Further details are provided in Section 3 of the attached Environmental Protection Plan.

This program will require the use of the GNWT winter road from Norman Wells to the Mackenzie River (approximately 30km); an ice bridge across the Mackenzie River; access south and west of the Mackenzie River and associated campsites. A LUP (S11T-002) and WL (S11L3-002) for the access, camps, airstrip and staging is currently held by Husky.

- b) Indicate if a camp is to be set up. (Provide details on a separate page, if necessary.)

Accommodation for the ground water investigation personnel will utilize camp space that will be co-located at the Base Camp site under LUP S11T-002 and WL S11L1-003.

6. Summary of potential environmental and resource impacts (describe the effects of the proposed land-use operation on land, water, flora & fauna and related socio-economic impacts). (Use separate page if necessary.)

See the Environmental Protection Plan accompanying this and the original application. No significant environmental impact is anticipated. Winter activity will limit impact to wildlife, land and water in the area. Existing access will be used and only minimal additional clearing will be required. Consultations with community members and traditional land users revealed no significant concerns with the proposed project. Husky has held discussions with the community on employment and business opportunities associated with the project. Minor amounts of waste may be generated at the rig sites. Inert drilling wastes such as drill cuttings, freshwater produced during testing and freshwater bentonite drilling muds will be disposed on site after testing. Husky will ensure all non-inert wastes are disposed to an approved waste handling facility. If an appropriate waste facility cannot be found in the NWT, these waste streams will be transported to an approved and licenced disposal facility in Alberta or British Columbia

7. Proposed restoration plans (use a separate page if necessary)

See the attached Environmental Protection Plan. Husky will ensure areas of ground disturbance are repaired and reseeded with a seed mix approved by the Aboriginal Affairs and Northern Development Canada (AANDC) Resource Management Officer in Norman Wells. In areas where ground disturbance and high erosion potential are identified, reclamation materials (coconut-straw matting and silt fences) may be installed to anchor the soil, prevent runoff water from channelling and reflect solar energy, reducing the potential for permafrost degradation during spring and summer. Final reclamation to occur within one full growing season following of the end of the permit. The access and wellsite reclamation will be inspected in the late summer/early fall of 2013 and annually throughout the term of the permits.

8. Other rights, licences or permits related to this permit application (mineral rights, timber permits, water licences, etc.)

**Exploration Licence 462 and 463
Access Agreement and Benefits Plan with the Tulita District Land Corporation (EL462 and EL463)
Existing Land Use Permit S11T-002 and Water Licence S11L3-002 (access and camp operations)**

Roads: N Is this to be a pioneered road?

Access will be by winter access permitted under Land Use Permit S11T-002

(Provide details on a separate page.)

Y Has the route been laid out or ground truthed?

9. Proposed disposal methods

To complete this section of the application form, a Waste Management Plan for the proposed activities is to be developed in accordance with the Board's *Guidelines for Developing a Waste Management Plan* (accessible at www.mvlwb.com) and submitted as an attachment to the application form. A template for this Plan is provided in the Guidelines.

See the Environmental Protection Plan accompanying this application.

a) Garbage:

Trash and garbage will be collected and disposed in an approved landfill. Combustibles will be incinerated.

c) Brush & trees:

Clearing will employ mulchers. Mulched debris will be left on site.

b) Sewage (Sanitary & Grey Water):

Sewage waste is covered under the existing LUP S11T-002 and WL S11L3-002.

d) Overburden (Organic soils, waste material, etc.):

Overburden will not be disturbed.

17. Applicant (Print name in full) **Kim Richardson per. Husky Oil Operations Limited**

Signature *Kim Richardson*

Date *October 11, 2012*

18. Fees Type A - \$150.00 Type B - \$150.00

Land Use Fees _____ hectares @ \$50.00/hectare

Assignment fee \$50.00

Total application and land use fees