Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

# Land Use Permit Application

**December 2014**

# Husky Oil Operations Limited

707 8th Avenue S.W.
Box 6525, Station D
Calgary, Alberta, Canada
T2P 3G7

Bus: (403) 298-6111
Fax: (403) 298-6378

December 19, 2014

**Wek'eezhii Land and Water Board**
#1-4905 48th St.
Yellowknife, NT
X1A 3S3

Attention: Ryan Fequet, Regulatory Manager

Dear Ryan:

**Re: Land Use Permit Application for Husky Oil Operations Limited Chedabucto Mineral Exploration Program**

Please find enclosed the application and supporting documentation for a Land Use Permit for the Husky Oil Operations Limited (Husky) Chedabucto Mineral Exploration Program that is proposed to commence in March/April of 2015. The project is located within the Tłı̨chǫ Region of the Northwest Territories. The Chedabucto Property is located on the western shore of the north arm of Great Slave Lake, 50 kilometres west of Yellowknife, NT. The property includes 29 mineral claims totaling 29,945 hectares.

Husky is proposing to drill approximately 200 bore holes in order to delineate the property for its silica content. The project will utilize the existing Government of Northwest Territories (GNWT) Department of Transportation (DOT) quarry site as the site for an emergency tent camp/core shack, fuel storage and drilling equipment lay down area.

The project requires the following land use area in hectares (ha):

Tent camp/core shack, fuel storage and drilling equipment lay down area = 2ha
Reverse circulation drill pads (0.0036ha x 175 pads) = .63ha
Diamond Drill pads (0.0064ha x 25 pads) = .16ha
Total 2.79ha - round up to 3ha
2ha included in initial fee = 1 ha

One cheque made out to the Receiver General for Canada is attached to cover the land use permit fee ($200.00). Should you have any questions regarding this application please contact the undersigned by telephone at (403) 298-6655, by fax at (403) 750-1722, or by email ken.hansen@huskyenergy.com.

Sincerely,
**HUSKY OIL OPERATIONS LIMITED**

Ken Hansen
Project Manager – NWT

Wek'èezhìi Land and Water Board

Box 32, Wekweètì, NT X0E 1W0
Tel: 867-713-2500 Fax: 867-713-2502

#1-4905 48th Street, Yellowknife, NT X1A 3S3
Tel: 867-765-4592 Fax: 867-765-4593
www.wlwb.ca

**Application for:**
**New Land Use Permit** [x] **Amendment** [ ] **to** _____

| | |
|---|---|
| 1. Applicant's name and mailing address:<br><br>**Husky Oil Operations Limited**<br>**Box 6525,Station D**<br>**Calgary, Alberta**<br>**T2P 3G7**<br>**Attention: Ken Hansen** | Fax number: (403) 298-6880<br><br>Telephone number: (403) 298-6655 |
| 2. Head office address:<br><br>**Same address as applicant.**<br><br>Field supervisor: **Aurora Geosciences Ltd.**<br>Radiotelephone: **To be determined** | Fax number:<br><br>Telephone number: |

3. Other personnel (subcontractor, contractors, company staff etc.)

**Aurora Geosciences Ltd. (Aurora) technical staff, Husky technical staff, fixed-wing and helicopter support staff, staff from two drilling rigs, and local field assistants.**

TOTAL: **16** (Number of persons on site)

4. Eligibility:
(Refer to section 18 of the *Mackenzie Valley Land Use Regulations*)

a)(i) a)(ii) **X** a)(iii) b)

5. a) Summary of operation (Describe purpose, nature and location of all activities.)

**The operation will consist of conducting exploration assessment work on claims and mineral leases held by the company in order to evaluate a high quality silica deposit. The Chedabucto Property is located on the western shore of the north arm of Great Slave Lake, 50 kilometres west of Yellowknife, NT. The property includes 29 mineral claims totaling 29,945 hectares (73,996 acres). Husky Oil Operations Limited (Husky) Husky has retained Aurora to manage the field project. Aurora will co-ordinate the contractors and labourers required for specific surveys, evaluations and related services.**

**Over the five year life of the initial permit and possible extension for two years, Husky will conduct reverse circulation drilling (RC) and diamond drilling (DD) with a combined total of approximately 200 holes, along with geophysical investigations to evaluate the silica resource potential of the Chedabucto Property.**

**Husky is proposing to commence a target specific exploration program to run during March and April of 2015. This is the first phase of a proposed 5-year program that will operate seasonally to optimize the type of exploration work being conducted. Husky will implement a phased approach to exploration on the Chedabucto Property, each phase contingent on the successful execution and positive results of the preceding phase. Equipment and personnel for the exploration program will be less than 5 tonnes in weight and will be mobilized to site by float/ski fixed-wing aircraft, helicopter, and/or winter road. The project will be based out of Yellowknife and drum fuel will be flown to site as demand requires and stored at the existing Government of Northwest Territories (GNWT) Department of Transportation (DOT) quarry site using accepted secondary containment practices.**

**Phase 1: Exploration**

In the 2015 program, approximately ten (10) DD holes (out of 25 identified locations) will be drilled with depths dependent upon the thickness of bedrock to a maximum of 250 metres (m) to obtain continuous core samples of the bedrock. Approximately seventy (70) RC holes will be drilled to collect cuttings samples of the unconsolidated silica and bedrock and to obtain baseline geotechnical groundwater and permafrost data. The majority of the RC holes will vary in depth from 5-30 m to test the thickness of the unconsolidated sand and selected locations (approximately 10 holes) will be drilled to test the bedrock of the Mount Clark Formation to a maximum depth of 175 m.

In addition to obtaining rock/cuttings samples from the 2015 Chedabucto drilling program, Husky will also collect baseline hydrogeological and permafrost information from the bore holes including:

- Measurements of groundwater water levels from each RC and DD bore hole location;
- Collection of groundwater samples from up to three RC bore hole locations and a lake grab sample; samples will be submitted to an accredited laboratory for chemical characterization as follows:
    - Routine water potability; and
    - Total/Dissolved Metals.
- Collect temperature-depth profiles from select RC and DD bore holes (number of bore-holes and locations still to be determined);
- Conduct hydraulic testing on select RC bore holes
    - Groundwater will not be discharged to surface during testing
- Measurements and sampling will be conducted for each bore hole once drilling has stopped, (i.e. prior to rig tear down and move to the next drilling location);
- No equipment will be left in the bore holes.

The proposed drill program is scheduled to run 3-6 weeks between March and April of 2015. The crew required to operate the RC and diamond drill rigs consist of a driller, driller's helper and either a geological technologist for RC rig and driller, driller's helper and a geologist for the DD rig. Up to two additional labourers may be employed as required. Where possible, local workers will be employed on the program. Local environmental/wildlife monitors will be employed for the duration for the field programs. During post-drilling inspection and clean-up, a number of laborers may be required for several days.

The drill rigs will be helicopter portable (Figure 3). The initial phase of drilling is proposed for the spring (March-April) of 2015 while the ground is frozen to minimize disturbance, while still taking advantage of longer daylight operating hours. It is anticipated that only minimal slashing will be required to prepare drilling locations, however up to 6 helicopter landing sites may need to be cleared. The typical size of a helicopter landing site is approximately 700 square metres.

Samples of material recovered by drilling will be transported to a lab that is rated to conduct proppant testing in accordance within the appropriate ISO/API standards. Specifically, this testing will analyze for sphericity, roundness, crush resistance, acid solubility, grain size and conductivity. Various ground-based geophysical surveys may be conducted if drill results require additional confirmation.

Geophysical crews commonly consist of 1-4 people during field operations. Geophysical surveys conducted to date have not required any line cutting and it is not anticipated that line cutting will be required for future work.

Follow-up geophysical and drilling activities may be required in subsequent years to address information gaps that arise following phase 1. These activities would consist of additional field mapping, geophysical (including but not limited to Ground Penetrating Radar, Resistivity Survey) and drilling activities (i.e. RC and DD). As with any mineral exploration program, there may be a requirement for a number of exploration phases. Each phase of exploration allows for a more targeted and site specific approach to delineate the prospect. While drilling activities will be conducted in the March-April period, it may be advantageous to conduct field mapping and geophysical surveys in the late summer-fall time period.

**Phase 2: Mini Bulk Sampling**

After successfully identifying a prospective silica resource, Phase 2 exploration will likely entail a mini-bulk sample program of the prospective silica resource. This phase of the program would include collecting a representative sample of material from test pits using a standard bucket loader and haul truck for unconsolidated or loosely consolidated material. The material removed from the test pits would be transported to a lab that is rated to conduct proppant testing in accordance within the appropriate ISO/API standards. Specifically, this testing will analyze for sphericity, roundness, crush resistance, acid solubility, grain size and conductivity.

Approximately 10 mini bulk samples will be collected. The locations have not yet been determined but Husky will submit geographical coordinates to the GNWT Land Use Inspector and Wek'eezhii Land and Water Board prior to commencing this phase of the exploration project. To facilitate the mini-bulk sampling, winter access to the area will be required; Husky will utilize existing trails wherever possible. If a new cut line is required it will kept to the minimum necessary to safely mobilize equipment to the selected locations.

b) Please indicate if a camp is to be set up. (Please provide details on a separate page, if necessary.)

**A temporary 4-man tent camp, core shack, and generator shack will be set up on the property and maintained seasonally throughout the life of the project. All Mackenzie Valley Land and Water Board (MVLWB) and Workers' Safety & Compensation Commission (WSCC) regulations will be followed. This tent camp will be used for emergency/safety support for the drill program and will be removed upon completion of the exploration phase and the site restored to original condition in accordance with Canadian Council of Ministers of the Environment (CCME) (see attached Closure & Reclamation Plan).**

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.)

**Drilling operations will be restricted to a very small surface footprint which will subsequently be reclaimed to its natural state using CCME and industry best practices. The small scale exploration program and assessment work will have minimal impact on the environment of the region. The temporary tent camp/core shack and fuel cache located at the existing GNWT-DOT quarry site will also have minimal impact and be completely removed and restored at the end of the project. A full description of the potential impacts is contained in the attached Summary Report.**

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

**At the end of the exploration phase, the temporary camp will be completely removed from the existing GNWT-DOT quarry site which will then be allowed to re-vegetate to a natural state. In addition, any diamond drilling setups will be rehabilitated to natural vegetation following established CCME guidelines and the Closure & Reclamation Plan attached.**

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

**Class 2 Archaeological Permit #2014-010 (see Appendix 6 of the attached Summary Report), Mineral rights as per Canada Mining Regulations and NWT Operating Licence (see Appendix 9 of the attached Summary Report). Other information is located in the Project Summary Report.**

Roads: Is this to be a pioneered road? **N/A** Has the route been laid out or ground truthed? **N/A**

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*.

a) Garbage: **See attached Summary Report.**

b) Sewage (Sanitary & Grey Water): **See Summary Report attached.**

c) Brush & trees: **See attached Summary Report.**

d) Overburden (Organic soils, waste material, etc.): **See attached Summary Report.**

10. Equipment (includes drills, pumps, etc.) (Please use separate page if necessary.) **See attached Summary Report.**

| Type & number | Size | Proposed use |
|---|---|---|
| | | |
| | | |
| | | |

| 11. Fuels | (√) | Number of containers | Capacity of containers | Location |
|---|---|---|---|---|
| Diesel | √ | 200 | 205 litres | Tent Camp/Core shack (Quarry site) / Drill |
| Gasoline | √ | 10 | 205 litres | Tent Camp/Core shack (Quarry site) / Drill |
| Jet-A/B | √ | 200 | 205 litres | Tent Camp/Core shack (Quarry site) |
| Propane | √ | 25 | 45 kg. | Tent Camp/Core shack (Quarry site) / Drill |

12. Containment fuel spill contingency plans. (Please attach separate contingency plan if necessary).

A spill contingency plan for the proposed activities is to be developed in accordance with INAC's *Guidelines for Spill Contingency Planning, April 2007* (click here to access). This plan is to be submitted as an attachment to the application form.

**See attached Spill Contingency Plan.**

13. Methods of fuel transfer (to other tanks, vehicles, etc.)

**Fuel will be transferred using 12V electric or hand-operated wobble pumps with hose assemblies and portable trays to minimize spillage risk. Spill kits will be available at all fuel storage and fuel transfer sites.**

14. Period of operation (includes time to cover all phases of project work applied for, including restoration)

**Proposed period of the permit is 5 years as described in the attached Summary Report, plus a possible 2 year extension. Operations will take place seasonally from 2015 until 2020.**

15. Period of permit (up to five years, with maximum of two years of extension).

**Proposed period of the permit is 5 years as described in the attached Summary Report, plus a possible 2 year extension.**

16. Location of activities by map co-ordinates (attached maps and sketches)

| | |
|---|---|
| Minimum latitude (degrees, minutes, seconds)<br>**62°15'50" N** | Maximum latitude (degrees, minutes, seconds)<br>**62°29'35" N** |
| Minimum longitude (degrees, minutes, seconds)<br>**115°13'26" W** | Maximum longitude (degrees, minutes, seconds)<br>**115°29'22" W** |

**NAD 83** Map Sheet no. **NTS 85J**

17. Applicant

Print name in full: **Ken Hansen**

(for). Signature Date Dec 19, 2014.

18. Fees Type A - $150.00 ** Type B - $150.00 ** (**Application Fees are Non-Refundable**)

Land use fee: 1 hectares @ $50.00/hectare $ 50.00

Assignment fee $50.00 $ _____

Total application and land use fees $ 200.00

***Please make all cheques payable to "Receiver General of Canada"***

**Husky Group Of Companies**
P.O. Box 6525 STN D
Calgary AB T2P 3G7

DATE
15 DEC 2014

CHEQUE NUMBER
60032754

To: RECEIVER GENERAL FOR CANADA
C/O WEK'EEZHII LAND & WATER BOARD
4905 48 ST STE 1
YELLOWKNIFE NT X1A 3S3

**Husky Group Of Companies**
P.O. Box 6525 STN D
Calgary AB T2P 3G7

DATE
15 DEC 2014

CHEQUE NUMBER
60032754

VENDOR RECEIVER GENERAL FOR CANADA VENDOR NUMBER 31033565

| DOCUMENT NUMBER | INVOICE NUMBER | INVOICE AMOUNT | DATE | DESCRIPTION | NET AMOUNT |
|---|---|---|---|---|---|
| 1700010609 | 20141215 | $200.00 | 15 DEC 2014 | Jenica von Kuster HS<br>EN2733 @ ph 2313 | $200.00 |
| | | | | TOTAL | **********$200.00 |

REMITTANCE ADVISE - RETAIN FOR YOUR RECORDS

PLEASE DETACH BEFORE DEPOSITING CHEQUE

**Husky Group Of Companies**
P.O. Box 6525 STN D
Calgary AB T2P 3G7

Canadian Imperial Bank of Commerce
Bankers Hall, 309 8th Ave Sw
CALGARY AB T2P 2P2

00009-010

CHEQUE NUMBER 60032754

DATE 1 5 1 2 2 0 1 4
D D M M Y Y Y Y

CANADIAN DOLLARS PAY EXACTLY **********$200.00
-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Ast-Dollar-Two-Zero-Zero-Per-Zero-Zero-

$ **********200.00

PAY TO THE ORDER OF

RECEIVER GENERAL FOR CANADA
C/O WEK'EEZHII LAND & WATER BOARD
4905 48 ST STE 1
YELLOWKNIFE NT X1A 3S3

**Husky Oil Operations Ltd.**
CANADIAN DOLLARS

PER
AUTHORIZED SIGNING OFFICER

PER
AUTHORIZED SIGNING OFFICER



⑈00006003275 4⑈ ⑆30309⑈010⑆ 47⑈02417⑈

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

# Summary for Land Use Permit Application

**December 2014**

# Table of Contents

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# 1.0 INTRODUCTION

Husky Oil Operations Limited (Husky) is one of the largest integrated oil and gas companies in Canada. With headquarters in Calgary, Alberta, Husky has approximately 5,500 permanent employees and a market cap of roughly C$33 billion. Husky has annual average production of approximately 312,000 barrels oil equivalent/day (as at December 31, 2013). Husky holds a total of 29 mineral claim blocks under the name of Aurora Geosciences Ltd. (Aurora) in the Chedabucto Lake area on the North arm of Great Slave Lake and wishes to conduct a delineation program in order to determine the depth and extent of the silica deposit.

Husky is currently exploring for a high quality silica source in the Northwest Territories that could be used to support ongoing oil and gas operations in Western Canada. Silica is an industrial mineral that is used in many applications such as construction, abrasives, filters, glass, ceramics and is used as a proppant in the hydraulic fracturing process. High quality silica is a key component in the development of unconventional hydrocarbon resources.

It is Husky's goal to produce high quality silica in the Northwest Territories. Husky has engaged Aurora to assist with the staking of mineral claims and with the evaluation of the Chedabucto silica deposit.

In December of 2011, after an exhaustive search of public domain data and preliminary regional field investigation, Husky directed Aurora to stake the Chedabucto Property. Aurora completed the initial round of staking acquiring approximately 15,661 hectares (ha) (38,700 acres). A second round of staking was completed in February of 2014 to secure an additional 14,285 ha (35,300 acres) of prospective land. The exploration work conducted in the fall of 2012 included line brushing, gridding and geophysical surveying, as well as hand auger sampling to confirm the distribution of the near surface sands. Approximately 90 line kilometres of surface geophysical surveying has been completed along with the collection of 149 silica samples.

Two potential silica resources have been identified: 1) unconsolidated silica sand that overlies bedrock adjacent to the western shoreline of Great Slave Lake; and 2) sandstone bedrock that underlies the unconsolidated silica sand and extends to the west at depth. Both the unconsolidated and consolidated sources of silica appear to be viable resource targets and warrant further investigation to determine the potential for economic extraction.

# 2.0 LOCATION AND ACCESS

The Chedabucto Property is located on the western shore of the north arm of Great Slave Lake, 50 kilometres west of Yellowknife, NT. The property includes 29 mineral claims totaling 29,945 ha (73,996 acres) (Figure 1). Access in the summer is by fixed-wing float or helicopter. Winter

access is possible by snow mobile, by ice-bridge (winter road) across the north arm, and by ski-equipped fixed-wing aircraft or helicopter. Yellowknife, NT is the nearest supply and logistics centre.


**Figure 1. Map showing location of Chedabucto property, settlements and infrastructure.**

# 3.0 PROPOSED ACTIVITIES

The activities to be covered under the Land Use Permit for the Chedabucto exploration project will include:

1. Fuel and equipment storage.
2. Reverse circulating and diamond drilling to delineate the silica deposit.
3. Maintenance and operation of a temporary tent camp/core shack.
4. Seasonal shutdown and removal of the tent camp/core shack and equipment.
5. Geophysical surveys.
6. Geochemical sampling.
7. Trenching for mini-bulk sampling of sand.
8. Pioneering of winter road routes in the area for logistical support.
9. Closure and Reclamation on an ongoing basis and at permit expiry.

The LUP application will cover a period of five years with a possible two year extension. During the operation of the exploration program, progressive restoration of field sample and drill sites will occur on an ongoing basis. At the end of the program, if a renewal is not sought, all unnecessary equipment will be backhauled to Yellowknife and any structures will be removed. The tent camp site will be restored using industry and CCME (Canadian Council of Ministers of the Environment) best practices.

Husky is proposing to commence a target specific exploration program to run during March and April of 2015. This is the first phase of a proposed 5-year program that will operate seasonally to optimize the type of exploration work being conducted. Husky will implement a phased approach to exploration on the Chedabucto Property, each phase contingent on the successful execution and positive results of the preceding phase. Equipment and personnel for the exploration program will be less than 5 tonnes in weight and will be mobilized to site by float/ski fixed-wing aircraft, helicopter, and/or winter road. The project will be based out of Yellowknife and drum fuel will be flown to site as demand requires and stored at the existing Government of Northwest Territories (GNWT) Department of Transportation (DOT) quarry site using accepted secondary containment practices.

Over the five year life of the initial permit and possible extension for two years, Husky will conduct reverse circulation drilling (RC) and diamond drilling (DD) with a combined total of approximately 200 holes, along with geophysical investigations to evaluate the silica resource potential of the Chedabucto Property. The 2015 drilling program will require two heli-portable drill rigs working concurrently on the property.

To support the field operations, a tent camp/core shack will be established at the GNWT-DOT quarry consisting of two (12 foot x 12 foot) plywood and canvas structures. In addition, there

will be a small structure for the power generator. A fuel cache and drilling equipment lay down area will also be established at the quarry. The total land use area at the quarry (Figure 2) is approximately 2 ha.


**Figure 2. Satellite image showing the existing GNWT-DOT quarry and access road (solid black line on centre right). The green dot indicates where the tent camp/core shack will be located.**

Husky has retained Aurora to manage the field project. Aurora will co-ordinate the contractors and labourers required for specific surveys, evaluations and related services. The work will be conducted under industry best practices and Workers Safety and Compensation Commission (WSCC) employment standards. Crews will work rotating shifts and be transported to site by rotary-wing charter aircraft based out of Yellowknife.

Husky has retained Golder Associates Ltd. (Golder) to conduct a preliminary an archaeological field assessment, has initiated Traditional Knowledge (TK) studies with three designated Aboriginal organizations and has engaged with land holders, governments and regulators on numerous occasions in association with the proposed 2015 program.

**Archaeological Assessment**

Husky retained Golder assisted by locally appointed Aboriginal support staff to complete an Archaeological Impact Assessment (AIA) within the project area. Golder completed the archaeological field study during the summer of 2014 to ensure the project area was visually inspected prior to the initial exploration program planned for late winter/early spring of 2015. The intent of the archaeological program was to compile information about the recorded and potential heritage resources within the project area and provide specific direction for the protection, management and/or recovery of these resources, if required. Based on the outcome of the AIA, nine proposed drill hole locations were omitted from the 2015 program. See Appendix VI for the Archaeological Impact Assessment report.

**Traditional Knowledge**

Husky is working with the designated Aboriginal organizations to facilitate preliminary Traditional Knowledge (TK) studies of the proposed project area. The organizations will use the scope of work in this LUP application as the basis to commission the studies. The three organizations that will conduct their own studies are: T'licho Government, North Slave Métis Alliance (NSMA) and the Yellowknives Dene First Nation (YKDFN). Husky will review the information shared by the TK studies and incorporate it into the design of the field program.

Husky sent out a request for proposals to conduct preliminary TK studies to all three organizations in June 2014. At the time of submittal of this Land Use Permit application, only the YKDFN has completed their preliminary TK study and submitted a summary to Husky (see Appendix VII). At present, the T'licho Government has just recently submitted a proposal to Husky for their preliminary TK study and work commenced in early December, 2014. Despite multiple attempts to commission a preliminary TK study with the NSMA, no proposal has been submitted to date due to limited available resources. It is Husky's intent to continue to work with the NSMA as their internal resources become available to capture TK as we progress through future programs.

In order to compliment the preliminary TK studies, Husky offered to bring a few Elders from each organization out to the proposed program area during the archaeological field study. The visit provided the Elders with an intimate view of the mineral claim area and the proposed exploration project and an opportunity to visit individual sites where the archaeological field team had discovered artifacts. T'licho Elders joined the site visit on August 18, 2014, Elders from the YKDFN participated on August 19, 2014 and the NSMA Elders visited on September 17, 2014.

**Stakeholder Engagement**

Husky is committed to comprehensive, meaningful, and ongoing engagement with land holders, with the local communities, and with affected stakeholders. In preparation for submitting this

application, and in accordance with the Mackenzie Valley Land and Water Board 'Consultation and Engagement Policy' (draft March 2013), Husky has developed and implemented an engagement plan that seeks to identify and mitigate concerns raised by stakeholders, and maximize opportunities and benefits in the region. The engagement plan will guide Husky's activities by ensuring that affected stakeholders are identified; key issues and concerns are identified and addressed; and, where reasonable and feasible, feedback is incorporated back into project planning (refer to Engagement Plan in Appendix VIII).

Husky recognizes the importance of engaging regulatory agencies early in the project planning process to understand their concerns and to also gain an understanding of their role in the review of applications. Husky worked with Aboriginal Affairs and Northern Development Canada (AANDC), Canadian Northern Economic Development Agency (CANNOR) to arrange a Resource Development Advisory group (RDAG) meeting in Yellowknife on January 21, 2014. The meeting was facilitated by the Northern Project Management Office (NPMO) and was well attended. It provided regulatory agencies with an opportunity to meet Husky representatives in person to discuss the Chedabucto silica prospect and to develop a common understanding among stakeholders (refer to list of participants in Appendix VIII).

Husky sent out an introductory letter on February 18, 2014 to the following organizations to introduce the company, the silica prospect, and future explorations plans:

- Akaitcho IMA office
- Kwe Beh Working Group
- T'licho Lands Protection Department
- North Slave Métis Alliance
- NWT Métis Nation
- Yellowknives Dene First Nation

In the letter, Husky also requested an in-person meeting with each of the organizations and received an invitation from three Aboriginal organizations: the T'licho Government / Kwe Beh Working Group (KBWG); the North Slave Métis Alliance (NSMA); and the Yellowknives Dene First Nation (YKDFN). Husky then followed up with face to face introductory meetings and continued with a series of engagement sessions (see Appendix VIII for further details).

Husky believes in building open and strong relationships with the local communities and intends to use local labour to support the program's field operations. Whenever possible, local businesses will be contracted for the required work. Husky will continue to engage the Aboriginal organizations during the life of this project.

**Phase 1: Exploration**

In the 2015 program, approximately ten (10) DD holes (out of 25 identified locations) will be drilled with depths dependent upon the thickness of bedrock to a maximum of 250 metres (m) to obtain continuous core samples of the bedrock. Approximately seventy (70) RC holes will be drilled to collect cuttings samples of the unconsolidated silica and bedrock and to obtain baseline geotechnical groundwater and permafrost data. The majority of the RC holes will vary in depth from 5-30 m to test the thickness of the unconsolidated sand and selected locations (approximately 10 holes) will be drilled to test the bedrock of the Mount Clark Formation to a maximum depth of 175 m. See Table 3-1 for detailed information on the bore hole type, designation and location. The nine drill locations omitted from the 2015 program are also indicated.

**Table 3-1. Proposed RC and DD bore holes.**

| HSE_ID | Latitude (NAD 83) | Longitude (NAD 83) | Deleted Location |
|---|---|---|---|
| RC1 | 62.48095 | -115.34356 | |
| RC2 | 62.47961 | -115.29898 | Deleted |
| RC3 | 62.46166 | -115.30000 | |
| RC4 | 62.40909 | -115.31522 | |
| RC5 | 62.39121 | -115.39174 | |
| RC6 | 62.39528 | -115.32864 | |
| RC7 | 62.37194 | -115.30508 | |
| RC8 | 62.35492 | -115.38333 | |
| RC9 | 62.35446 | -115.34471 | |
| RC10 | 62.33428 | -115.36845 | |
| RC11 | 62.34249 | -115.36067 | |
| RC12 | 62.35071 | -115.35288 | |
| RC13 | 62.35892 | -115.34508 | |
| RC14 | 62.36538 | -115.33894 | |
| RC15 | 62.33904 | -115.35008 | |
| RC16 | 62.35984 | -115.31618 | |
| RC17 | 62.35160 | -115.32383 | |
| RC18 | 62.34335 | -115.33147 | |
| RC19 | 62.33511 | -115.33911 | |
| RC20 | 62.31687 | -115.30051 | |
| RC21 | 62.32030 | -115.31835 | |
| RC22 | 62.32596 | -115.34786 | |
| RC23 | 62.38535 | -115.30965 | |
| RC24 | 62.38560 | -115.32898 | |
| RC25 | 62.38585 | -115.34831 | |
| RC26 | 62.38610 | -115.36764 | |
| RC27 | 62.38630 | -115.38345 | |
| RC28 | 62.39512 | -115.31601 | Deleted |
| RC29 | 62.46405 | -115.32825 | |
| RC30 | 62.46828 | -115.34278 | |

| HSE_ID | Latitude (NAD 83) | Longitude (NAD 83) | Deleted Location |
|---|---|---|---|
| RC31 | 62.47217 | -115.35588 | |
| RC32 | 62.48051 | -115.38444 | |
| RC33 | 62.48253 | -115.36142 | |
| RC34 | 62.47652 | -115.37054 | |
| RC35 | 62.46750 | -115.38443 | |
| RC36 | 62.46019 | -115.39569 | |
| RC37 | 62.48140 | -115.32119 | Deleted |
| RC38 | 62.47310 | -115.27404 | Deleted |
| RC39 | 62.47527 | -115.28232 | |
| RC40 | 62.46876 | -115.29567 | |
| RC41 | 62.47241 | -115.28821 | |
| RC42 | 62.48463 | -115.33296 | |
| RC43 | 62.47840 | -115.30998 | |
| RC44 | 62.47496 | -115.29756 | |
| RC45 | 62.46921 | -115.27666 | |
| RC46 | 62.46552 | -115.26349 | Deleted |
| RC47 | 62.47844 | -115.34793 | |
| RC48 | 62.47397 | -115.33343 | |
| RC49 | 62.46860 | -115.31549 | |
| RC50 | 62.46492 | -115.30335 | |
| RC51 | 62.45427 | -115.30407 | |
| RC52 | 62.45409 | -115.28961 | |
| RC53 | 62.44790 | -115.31351 | |
| RC54 | 62.44778 | -115.30433 | |
| RC55 | 62.44775 | -115.29536 | |
| RC56 | 62.44176 | -115.29560 | |
| RC57 | 62.44172 | -115.28756 | Deleted |
| RC58 | 62.44190 | -115.30456 | |
| RC59 | 62.45416 | -115.29509 | |
| RC60 | 62.44518 | -115.29550 | |
| RC61 | 62.43683 | -115.29578 | Deleted |
| RC62 | 62.43697 | -115.30667 | |
| RC63 | 62.43139 | -115.31167 | |
| RC64 | 62.42311 | -115.31917 | |
| RC65 | 62.41646 | -115.32524 | |
| RC66 | 62.39151 | -115.32868 | |
| RC67 | 62.39964 | -115.32442 | |
| RC68 | 62.40406 | -115.32011 | |
| RC69 | 62.41366 | -115.31090 | Deleted |
| RC70 | 62.42185 | -115.30300 | |
| RC71 | 62.43004 | -115.29508 | |
| RC72 | 62.43673 | -115.28864 | |
| RC73 | 62.40409 | -115.32414 | |
| RC74 | 62.40401 | -115.31042 | |
| RC75 | 62.40394 | -115.29937 | Deleted |
| RC76 | 62.39606 | -115.38323 | |

| HSE_ID | Latitude (NAD 83) | Longitude (NAD 83) | Deleted Location |
|---|---|---|---|
| RC77 | 62.39566 | -115.35468 | |
| RC78 | 62.46019 | -115.39569 | |
| RC79 | 62.48140 | -115.32119 | |
| DDH1 | 62.47310 | -115.27404 | |
| DDH2 | 62.47527 | -115.28232 | |
| DDH3 | 62.46876 | -115.29567 | |
| DDH4 | 62.47241 | -115.28821 | |
| DDH5 | 62.48463 | -115.33296 | |
| DDH6 | 62.47840 | -115.30998 | |
| DDH7 | 62.47496 | -115.29756 | |
| DDH8 | 62.46921 | -115.27666 | |
| DDH9 | 62.46552 | -115.26349 | |
| DDH10 | 62.47844 | -115.34793 | |
| DDH11 | 62.47397 | -115.33343 | |
| DDH12 | 62.46860 | -115.31549 | |
| DDH13 | 62.46492 | -115.30335 | |
| DDH14 | 62.45427 | -115.30407 | |
| DDH15 | 62.45409 | -115.28961 | |
| DDH16 | 62.44790 | -115.31351 | |
| DDH17 | 62.44778 | -115.30433 | |
| DDH18 | 62.44775 | -115.29536 | |
| DDH19 | 62.44176 | -115.29560 | |
| DDH20 | 62.44172 | -115.28756 | |
| DDH21 | 62.44190 | -115.30456 | |
| DDH22 | 62.45416 | -115.29509 | |
| DDH23 | 62.44518 | -115.29550 | |
| DDH24 | 62.43683 | -115.29578 | |
| DDH25 | 62.43697 | -115.30667 | |

The proposed drill program is scheduled to run 3-6 weeks between March and April of 2015. The crew required to operate the RC and diamond drill rigs consist of a driller, driller's helper and either a geological technologist for RC rig and driller, driller's helper and a geologist for the DD rig. Up to two additional labourers may be employed as required. Where possible, local workers will be employed on the program. Local environmental/wildlife monitors will be employed for the duration for the field programs. During post-drilling inspection and clean-up, a number of laborers may be required for several days.

While the drilling program is expected to be completed by March 31, 2015, this phase is at the mercy of weather, production rates in a new terrain and property, and other production related factors associated with a drill program. It is possible that the final components of the field program including site cleanup and demobilization would extend into April. The program will

not be initiated prior to March 2015 because of environmental considerations (weather, daylight, and related efficiencies) and permitting requirements.

The drill rigs will be heli-portable (Figure 3). The initial phase of drilling is proposed for the spring (March-April) of 2015 while the ground is frozen to minimize disturbance, while still taking advantage of longer daylight operating hours. It is anticipated that minimal slashing will be required to prepare drilling locations, however up to 6 helicopter landing sites may need to be cleared. The typical size of a helicopter landing site is approximately 0.007 ha (70 square metres ($m^2$)) and any clearing would be part of the drill pad site. The typical footprint of a heli-portable drilling rig is approximately 0.0036 ha [6 m x 6 m (36 $m^2$)] for the RC pads and 0.0064 ha [8 m x 8 m (64 $m^2$)] for the DD pads.

Left: picture showing reverse circulation drill in operation. Below picture showing diamond drill in operation. Note plastic buckets and 45 gallon fuel drums for scale.

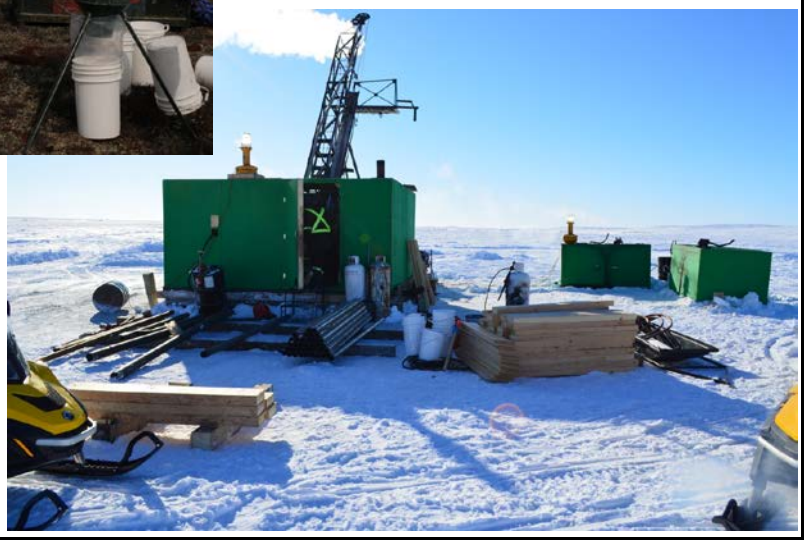


**Figure 3. Example pictures showing reverse circulation and diamond drill rigs.**

Samples of material recovered by drilling will be collected at the DOT quarry storage area then later transported to a lab that is rated to conduct proppant testing in accordance within the appropriate ISO/API standards. Specifically, this testing will analyze for sphericity, roundness, crush resistance, acid solubility, grain size and conductivity.

In addition to obtaining rock/cuttings samples from the 2015 Chedabucto drilling program, Husky will also collect baseline hydrogeological and permafrost information from the bore holes including:

- Measurements of groundwater water levels from each RC and DD bore hole location;
- Collection of groundwater samples from up to three RC bore hole locations and a lake grab sample; samples will be submitted to an accredited laboratory for chemical characterization as follows:
    - Routine water potability; and
    - Total/Dissolved Metals.
- Collect temperature-depth profiles from select RC and DD bore holes (number of bore-holes and locations still to be determined);
- Conduct hydraulic testing on select RC bore holes
    - Groundwater will not be discharged to surface during testing
- Measurements and sampling will be conducted for each bore hole once drilling has stopped, (i.e. prior to rig tear down and move to the next drilling location);
- No equipment will be left in the bore holes.

A temporary 4-man tent camp, core shack, and generator shack will be set up on the property. This camp will consist of two tents and an enclosure for the generator. All Mackenzie Valley Land and Water Board (MVLWB) and WSCC regulations will be followed. This tent camp will be used for emergency/safety support for the drill program and will be removed upon completion of the exploration phase.

While drilling activities will be conducted in the March-April period, it may be advantageous to conduct field mapping and geophysical surveys in the late summer-fall time period. Various ground-based geophysical surveys may be conducted if drill results require additional confirmation. Geophysical crews commonly consist of 1-4 people that survey over the property. The geophysical surveys conducted to date have not required any line cutting and it is not anticipated that significant line cutting will be required for future geophysical work. Equipment that might be employed in summer geophysical testing includes, but is not limited to, ground penetrating radar (GPR) and a resistivity mapping tool (Ohm Mapper). These tools have both been employed in previous work and have left no trace on the land.

Additional follow-up geophysical and drilling activities may also be required in subsequent years to address information gaps that arise following Phase 1. These activities would consist of additional field mapping, geophysical (not limited to GPR, Ohm Mapper) and drilling activities (i.e. RC and DD). As with any mineral exploration program, there may be a requirement for a number of exploration phases. Each phase of exploration allows for a more targeted and site specific approach to delineate the prospect.

**Phase 2: Mini Bulk Sampling**

After successfully identifying a prospective silica resource, Phase 2 exploration will likely entail a mini-bulk sample program of the prospective silica resource. This phase of the program would include collecting a representative sample of material from test pits using a standard bucket loader and haul truck for unconsolidated or loosely consolidated material. The material removed from the test pits would be transported to a lab that is rated to conduct proppant testing in accordance within the appropriate ISO/API standards. Specifically, this testing will analyze for sphericity, roundness, crush resistance, acid solubility, grain size and conductivity.

Approximately 10 mini bulk samples will be collected. The locations have not yet been determined but Husky will submit geographical coordinates to the GNWT Land Use Inspector and Wek'eezhii Land and Water Board (WLWB) prior to commencing this phase of the exploration project. To facilitate the mini-bulk sampling, winter access to the area will be required; Husky will utilize existing trails wherever possible. If a new cut line is required it will kept to the minimum necessary to safely mobilize equipment to the selected locations.

The work proposed in Phase 2 will be conducted within the period of the approved Land Use Permit.

**Phase 3: Feasibility and Engineering**

Following a successful exploration program Husky will then evaluate the socio-economic and environmental impact, and engineering feasibility of the property to develop and implement a resource extraction strategy. Phase 3 is outside of the scope of this Land Use Permit and will be applied for in the future as a separate application.

# 4.0 EQUIPMENT

The list provided has been compiled in as much detail as available at the time of writing. It provides an indication of the general types of equipment used to support the upcoming 2015 exploration season at Chedabucto. Work will commence in the winter of 2015 with bore hole drilling exploration and follow with additional drilling, geophysics and/or mini-bulk sampling activities in subsequent years. The list also contains the equipment required for trenching, and for winter ice road construction/maintenance. If equivalent equipment is substituted, the Land Use Inspector will be notified.

| Type & Number | Weight (kilograms) | Proposed Use |
|---|---|---|
| 1 x Hornet dry or equivalent RC drill rig | 4,350kg | Drill testing glacial stratigraphy |
| 1 x Boyles 25A/37 or equivalent diamond drill rig | 8,600kg | Drill testing bedrock targets |
| 1 x Bell 407 helicopter or equivalent | 1,300kg | Drill & crew movements |

| | | |
|---|---|---|
| 1 x Twin Otter DHC-6 or equivalent fixed-wing aircraft | 5,670kg | Crew movements, supply runs (future activity planned in Phase 2) |
| 2 x Bombardier skidoo or equivalent | 250kg ea. | Camp support |
| 2 x Honda 350 ATV or equivalent | 250kg ea. | Camp support |
| 1 x 10 kW diesel generator or equivalent | 350kg | Electrical power supply |
| 1 x powered ice auger or equivalent | 20kg | Ice hole drilling for water supply and grab samples |
| 3 x Honda water pumps or equivalent | 25kg ea. | Tent camp/core shack and diamond drill water |
| TL-120 Terrax (excavator/loader) or equivalent | 3,175kg | To move material for trench bulk sample (future activity planned in Phase 2) |
| 2 x mobile canvas tent & floor or equivalent core logging shack and survival tent | 500kg ea. | Camp support |

# 5.0 FUEL STORAGE

The current plans are to store fuel in 205 litre (45 gallon) steel containers (drums) and will be stored at the GNWT-DOT existing quarry (see location on Project Map). Fuel will be stored at a minimum of 100 m from all waterbodies and watercourses to prevent contamination of water resources. Spill response equipment will also be stored at the quarry (see Spill Contingency Plan for further details).

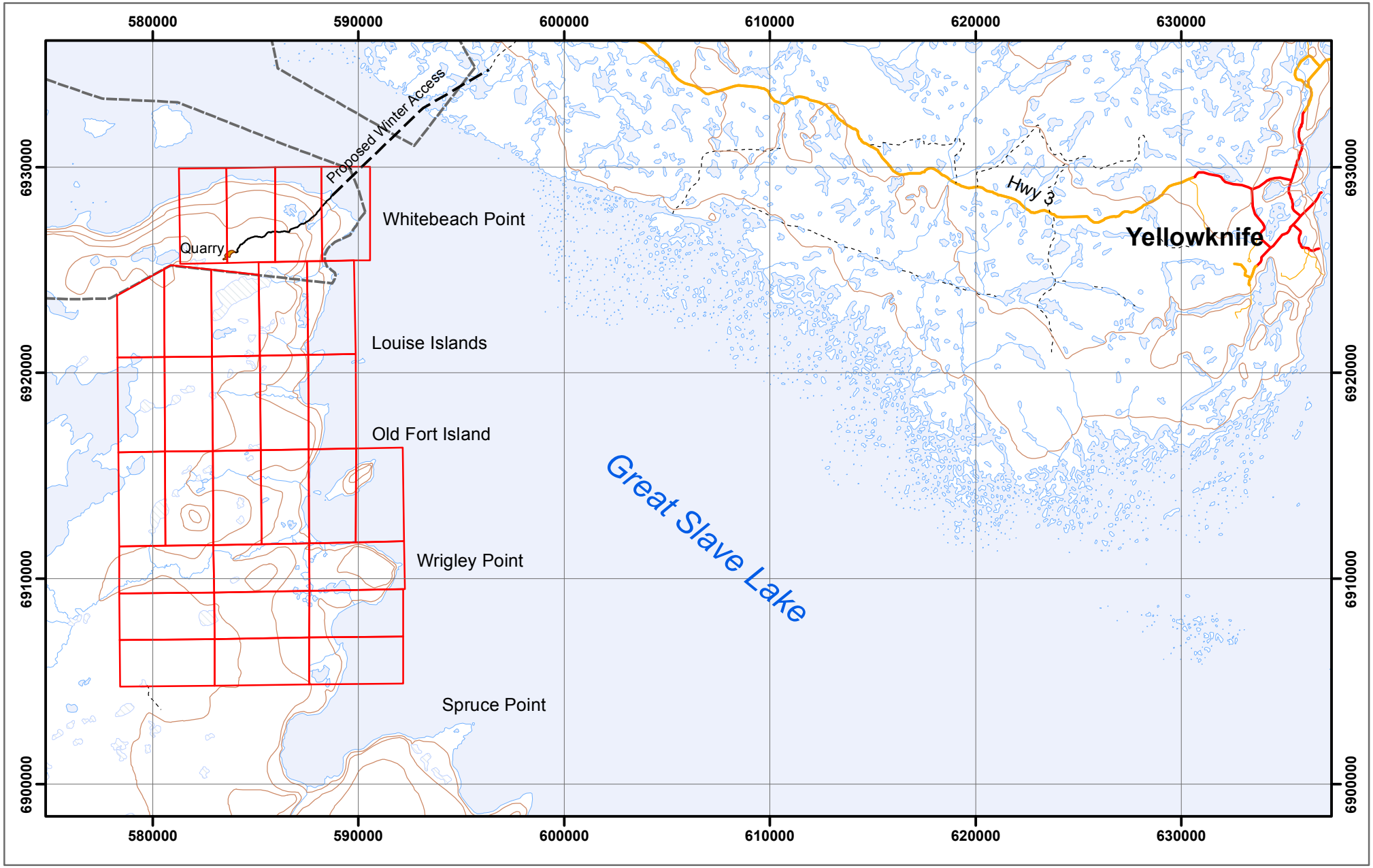
**Table 4-2. Fuel Types and Storage.**

| Fuel Type | Number of Containers | Volume capacity of Containers |
|---|---|---|
| Diesel | 200 | 205L drums |
| Gasoline | 10 | 205L drums |
| Jet-A/B | 200 | 205L drums |
| Propane | 25 | 45 kg (100 pound) cylinders |

In the event of continued project exploration success, a portion of the volume of listed liquid fuel types may be stored using Envirotanks that are compliant with Environment Canada's *Petroleum and Allied Petroleum Products Storage Tanks Regulations*.

Map 1

Regional Area




# 2015 Chedabucto Project

N

1:250,000

4 2 0 4 8 12 Km

Hwy 3
Proposed Access
Quarry Access
NTDB Trail
DOT Quarry
CHE Claims
PAS Area

Map 2

Detailed Program Map – 2015 Potential Drill Locations

PAS Area

Proposed Winter Access

Whitebeach Point

Louise Island

Old Fort Island

Wrigley Point

Chedabucto Lake

Great Slave Lake

Quarry

CHE 1 CHE 2 CHE 3 CHE 4 CHE 5 CHE 6 CHE 7 CHE 8 CHE 9 CHE 10 CHE 11 CHE 12 CHE 13 CHE 14 CHE 15 CHE 16 CHE 17 CHE 18 CHE 19 CHE 20 CHE 21 CHE 22 CHE 23 CHE 24 CHE 25 CHE 26 CHE 27 CHE 28 CHE 29

DDH1 DDH2 DDH3 DDH4 DDH5 DDH6 DDH7 DDH8 DDH9 DDH10 DDH11 DDH12 DDH13 DDH14 DDH15 DDH16 DDH17 DDH18 DDH19 DDH20 DDH21 DDH22 DDH23 DDH24 DDH25

RC1 RC2 RC3 RC4 RC5 RC6 RC7 RC8 RC9 RC10 RC11 RC12 RC13 RC14 RC15 RC16 RC17 RC18 RC19 RC20 RC21 RC22 RC23 RC24 RC25 RC26 RC27 RC28 RC29 RC30 RC31 RC32 RC33 RC34 RC35 RC36 RC37 RC38 RC39 RC40 RC41 RC42 RC43 RC44 RC45 RC46 RC47 RC48 RC49 RC50 RC51 RC52 RC53 RC54 RC55 RC56 RC57 RC58 RC59 RC60 RC61 RC62 RC63 RC64 RC65 RC66 RC67 RC68 RC69 RC70 RC71 RC72 RC73 RC74 RC75 RC76 RC77 RC78 RC79

B3-1-02 DE-95-05 DE-95-06 DE-95-08 DE-95-10 DE-95-07B DE-95-07A

085-J-12 085-J-11 085-J-10 085-J-07 085-J-06 085-J-05 085-J-04 085-J-03

# 2015 Chedabucto Project

N

1:40,000

4 2 0 4 Km

**Planned Activity**

- RC Priority
- DDH Priority
- DDH Secondary
- Deleted Location
- Proposed Access

**Legacy Activity**

- Existing Drill Holes
- Legacy Core Storage
- Quarry Access
- PAS Area
- DOT Quarry

Tent camp, fuel cache, core storage

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX I**

Spill Contingency Plan

Effective December 1, 2014

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX II**

Closure & Reclamation Plan

Effective December 1, 2014

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX III**

Wildlife, Archaeological & Environmental Awareness Plan

Effective December 1, 2014

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX IV**

Emergency Procedures

And

General Field Camp Safety

(Aurora Geosciences Ltd. – Safety Manual)

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX V**

Waste Management Plan

Effective December 1, 2014

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX VI**

Archaeological Impact Assessment Report

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX VII**

Traditional Knowledge Studies

# Yellowknives Dene First Nation
# Preliminary Traditional Knowledge Study Report

Yellowknives Dene First Nation
Land and Environment

# Èdaalà Preliminary Traditional Knowledge Report

## (for Husky Energy's Chedabucto Silica Project)

*From:*

Yellowknives Dene First Nation
Fax: (867)766-3497

*To:*

Husky Energy
707 8th Avenue S.W.
Box 6525, Station D
Calgary, Alberta
T2P 3G7

*September 30, 2014*

YKDFN Land & Environment

## Background

The Tsetsǫǫt'ıné people (and their descendants, the Yellowknives Dene) have used, since long before the arrival of fur traders and prospectors, an extensive system of trails that connect their north shore villages with their trapping and hunting areas to the north and along the west shore of Great Slave Lake.

This system of major traditional trails, within and beyond the Chief Drygeese Territory, was first recorded on topographic maps in the 1970s. The addition of cultural assets, and lesser known trails and traplines associated with these trails, soon followed. Subsequent Traditional Knowledge projects, particularly those conducted in the early 2000s, continued to add to, and refine, what is still considered baseline data. Past and current land use by the Yellowknives Dene defined the establishment of the boundaries of the Chief Drygeese Territory (see map).

On August 1st, 2014 YKDFN's Traditional Knowledge Program, and the Goyatiko Language Society, convened a group of Elders to discuss the past and present use of the Whitebeach Point area and the location of cultural assets associated with that use[1].

## Èdaalà

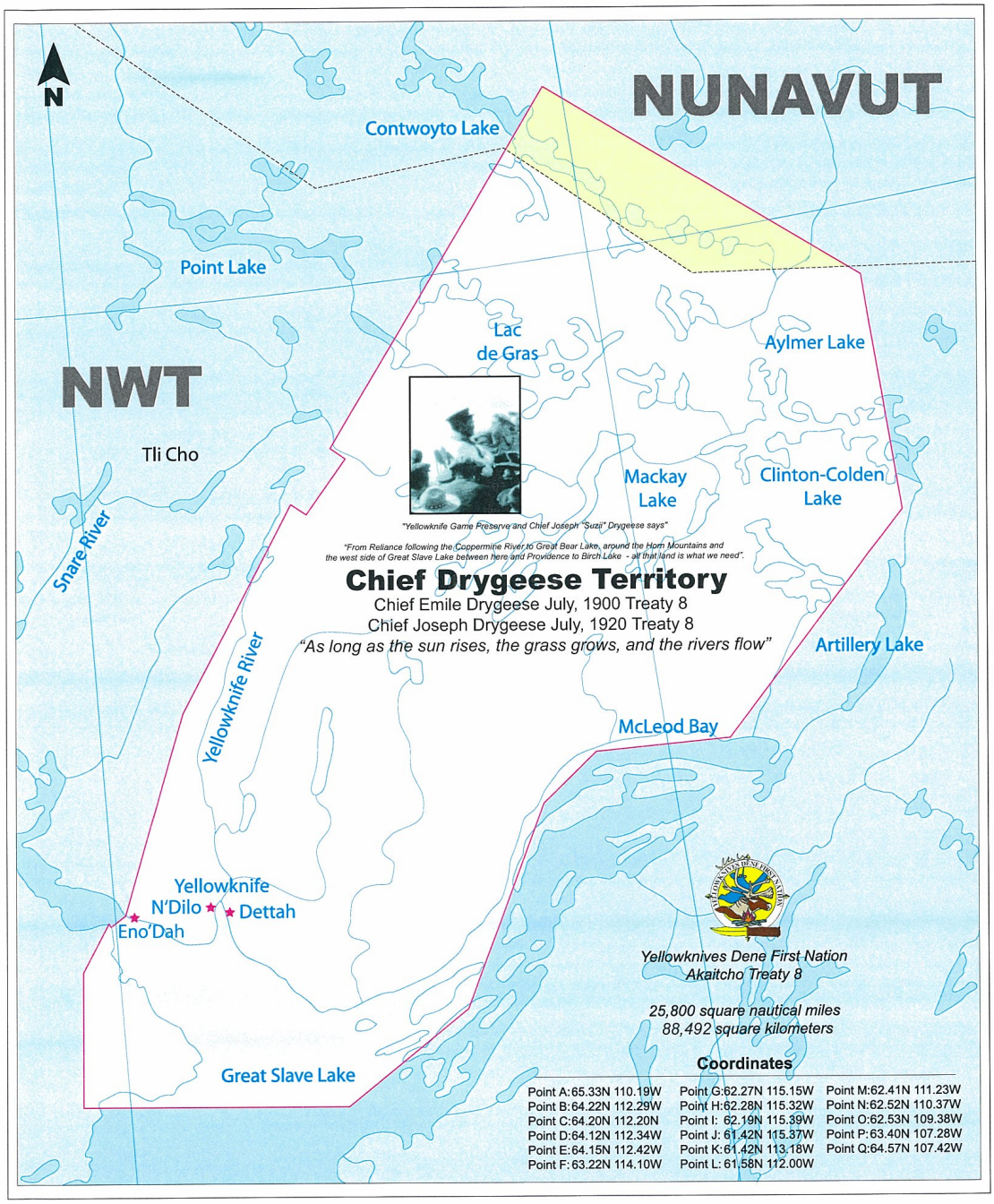
The west shore of Great Slave Lake, from near Whitebeach Point to beyond Wrigley Point, is referred to by the Yellowknives Dene as Èdaalà ("long point"). The area is known for its abundant fish, moose, woodland caribou, eagles, beavers, muskrats and more recently, bison. The crossing from the north shore of the North Arm, in the vicinity of the traditional Yellowknives villages of Enǫǫda, Whacha Mįk'è, and Tłi'ke, is less than 6 kilometres, an easy canoe traverse when the weather is favourable.

Travel along the shore of Èdaalà is often difficult because of shallow water extending many kilometres offshore and with onshore winds the waves can be deadly. Elders expressed concern that Husky Energy's activities in the area would disturb the graves of people who died while travelling along this shore or while hunting or trapping inland. They pointed out several locations along the shore where graves are known to exist (and gave the names of some of the people buried there) and suggested that the entire shoreline should be looked at for additional graves. This area was not part of a program in the late 1990s and early 2000s where Yellowknives Dene gravesites were found and marked by picket fences. Graves in this area would still be marked in the traditional manner with stones placed in a rectangular pattern, by logs laid on the grave, or by stones marking only the corners. Graves marked in this way are difficult to see and easy to disturb.

---

1 This report does not refer, by name, to individuals who provided information nor does it give spatial data specific to cultural assets. Traditional Knowledge of Indigenous Peoples Is Intellectual Property. All traditional knowledge of Yellowknives Dene is the intellectual property of Yellowknives Dene First Nation, and is protected by international intellectual property rights of indigenous peoples. As such, Yellowknives Dene reserve the right to use and make public parts of their traditional knowledge as they deem appropriate from time to time. Use of Yellowknives traditional knowledge by any party other than Yellowknives Dene First Nation does not infer comprehensive understanding of the knowledge, nor does it infer implicit support for activities or projects in which this knowledge is used in print, visual, electronic, or other media.

The general locations of trails, cabins (both old and new), camps, trapping areas, berry picking sites, fishing sites, etc. were marked on a 1:50,000 scale topographic map by Elders but they were quick to point out that these locations need to be verified on the ground. Verification of sites in other Chief Drygeese Territory locations, in particular Yellowknife Bay, has demonstrated a wide variance between the location on the annotated TK map and the actual location on the ground.



Elders also expressed their concerns about the disturbance of important cultural sites that may not be visible on the ground. Èdaalà is the location where an important part of the Akaitcho story took place nearly 200 years ago. During the time when Akaitcho and his people were defending their land from the Tłicho who, having acquired guns shortly after the establishment of Fort Franklin (Délı̨ne) in 1825, where expanding their territory beyond their traditional lands around the north shore of Great Bear Lake. Akaitcho encountered a group of Tłicho at Wrigley Point and in the ensuing battle many Tłicho were killed. Akaitcho piled their bones on Old Fort Island and poured their blood, as a warning to the Tłicho, on the outcrop of rock that extends north into the North Arm approximately 2 kilometres northwest of Whitebeach Point. This location, known as "Red Rock" or "Blood Rock", became an important part of the boundary between Tłicho lands and Tsetsǫ́ǫt'ıné lands as negotiated by Akaitcho and Edzo during the peace talks of the late 1820s. For this reason it also forms part of the modern boundary between Tłicho lands and Yellowknives Dene lands.

**Recommendations**

The Traditional Knowledge work (including archaeological) for this area is considered incomplete. The locations for the few known culturally significant places are only dots or lines on a map, they have not been verified, nor have precise GPS locations been taken. Given that use of the area by the Yellowknives Dene dates back hundreds, and likely thousands of years, we suspect that a more precise on-the-ground survey would uncover considerable evidence of these past activities.

Should Husky Energy's Chedabucto Silica Project proceed beyond the exploration phase it is paramount that detailed Traditional Knowledge research take place for this area and that that work must include on-the-ground verification of these important cultural assets.

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX VIII**

Engagement Plan and Record of Engagement

Attached as Separate Document

Husky Oil Operations Limited

# Chedabucto Silica Project

# Delineation Program

# Tłı̨chǫ Region, NWT

**(NTS Sheet 85J)**

**62°15’50” N to 62°29’35” N**

**-115°13’26” W to 115°29’22” W**

**APPENDIX IX**

Proof of Registration in NWT and Mineral Tenure

Government of Northwest Territories Prospecting Licence

Northwest Territories

**Licence number:** N34295

Licence expires after March 31, unless renewed yearly.

**Name:** Kenneth Hansen Husky Oil Operations Limited

**Address:**

**Phone Number:**

**E-mail address:**

**Commencement Date:** 2014-07-14

**Expiry Date:** 2015-03-31

Issued under and subject to the provisions of the Mining Regulations and is only valid for use in the NWT. This licence authorizes its holder to:

- prospect for the purpose of staking a claim;
- stake a claim;
- apply to record a claim;
- apply for a prospecting permit;
- be issued a written confirmation under Section 15(11), a certificate of work under subsection 47(1) or a certificate of extension under subsection 42(2);
- be issued a lease of a recorded claim or a renewal of such a lease; or
- acquire, alone or with another licensee, a prospecting permit, recorded claim or lease of a recorded claim.

Government of Northwest Territories Operating Licence

Northwest Territories Industry, Tourism and Investment

Ms. Debi Quillian
Land Manager
Husky Oil Operations Ltd.
707 8TH AVENUE SW
PO BOX 6525, STATION D
CALGARY AB T2P 3G7

MAY 01 2014

Dear Ms. Quillian:

**Husky Oil Operations Ltd. Operating License**

Pursuant to Section 10 of the *Oil and Gas Operations Act,* 2014 and your Application dated March 21, 2014, Operating License NWT-OL-2014-006 is hereby granted to Husky Oil Operations Ltd. (the Licensee).

This Operating License is in effect from April 1, 2014 to March 31, 2015.

If you have any questions please contact the undersigned at (867) 920-8935 or deborah_archibald@gov.nt.ca.

Sincerely,

Deborah Archibald
Chief Conservation Officer
Office of the Regulator of Oil and Gas Operations (OROGO)

Attachment

Northwest Territories

GNWT1 - GOVERNMENT OF THE NWT
Financial Shared Services
Department of Finance
Government of the Northwest Territories
Yellowknife, NT X1A 2L9

# Cash Drawer Receipt

| | |
|---|---|
| **Date:** | 2014-04-07 14.44 |
| **Receipt Number:** | 52492 |
| **Customer Number:** | 0001234567 |
| **Bill To:** | Direct Journal Customer Cash Drawer<br>Direct Journal Customer Cash Drawer<br>P.O. BOX 1320<br>Yellowknife, NT X1A 2L9 |
| **Payment Purpose:** | CHQ# 44493073 - Husky Group of Companies |
| **Payment Amount:** | 25.00 |
| **Check** | 25.00 |
| **Total Tendered:** | 25.00 |
| **Change Due:** | 0.00 CAD |
| **Drawer:** | YKFSS |
| **Cashier:** | heather.chang |
| Operating License | |

Mineral Tenure

The Chedabucto Property consists of 29 active mineral claims recorded in the Mackenzie Mining District (Figure 2). Husky claims are held 100% in the name of Aurora under contract to Husky. Claim information[1] is summarized below:

**Table 1. Mineral Tenure Summary Table**

| Claim Number | Claim Name | Claim Status | NTS | Date Recorded | Anniversary Date | Acreage |
|---|---|---|---|---|---|---|
| K15944 | CHE 4 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15945 | CHE 5 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15948 | CHE 8 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15947 | CHE 7 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15943 | CHE 3 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15941 | CHE 1 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15953 | CHE 13 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15946 | CHE 6 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15955 | CHE 15 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K16959 | CHE 19 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16968 | CHE 28 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16965 | CHE 25 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16969 | CHE 29 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16966 | CHE 26 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16964 | CHE 24 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16961 | CHE 21 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2563.4 |
| K16962 | CHE 22 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16960 | CHE 20 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16963 | CHE 23 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2582.5 |
| K16958 | CHE 18 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2329.2 |
| K16957 | CHE 17 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2475.7 |
| K16956 | CHE 16 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2073.4 |
| K16967 | CHE 27 | ACTIVE | 085J06 | 2/17/2014 | 2/17/2016 | 2575 |
| K15954 | CHE 14 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15952 | CHE 12 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15949 | CHE 9 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15942 | CHE 2 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15951 | CHE 11 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |
| K15950 | CHE 10 | ACTIVE | 085J06 | 12/21/2011 | 12/21/2014 | 2582.5 |

[1] Claim information as provided by Industry, Tourism and Investment (http://apps.geomatics.gov.nt.ca/) on July 14, 2014.

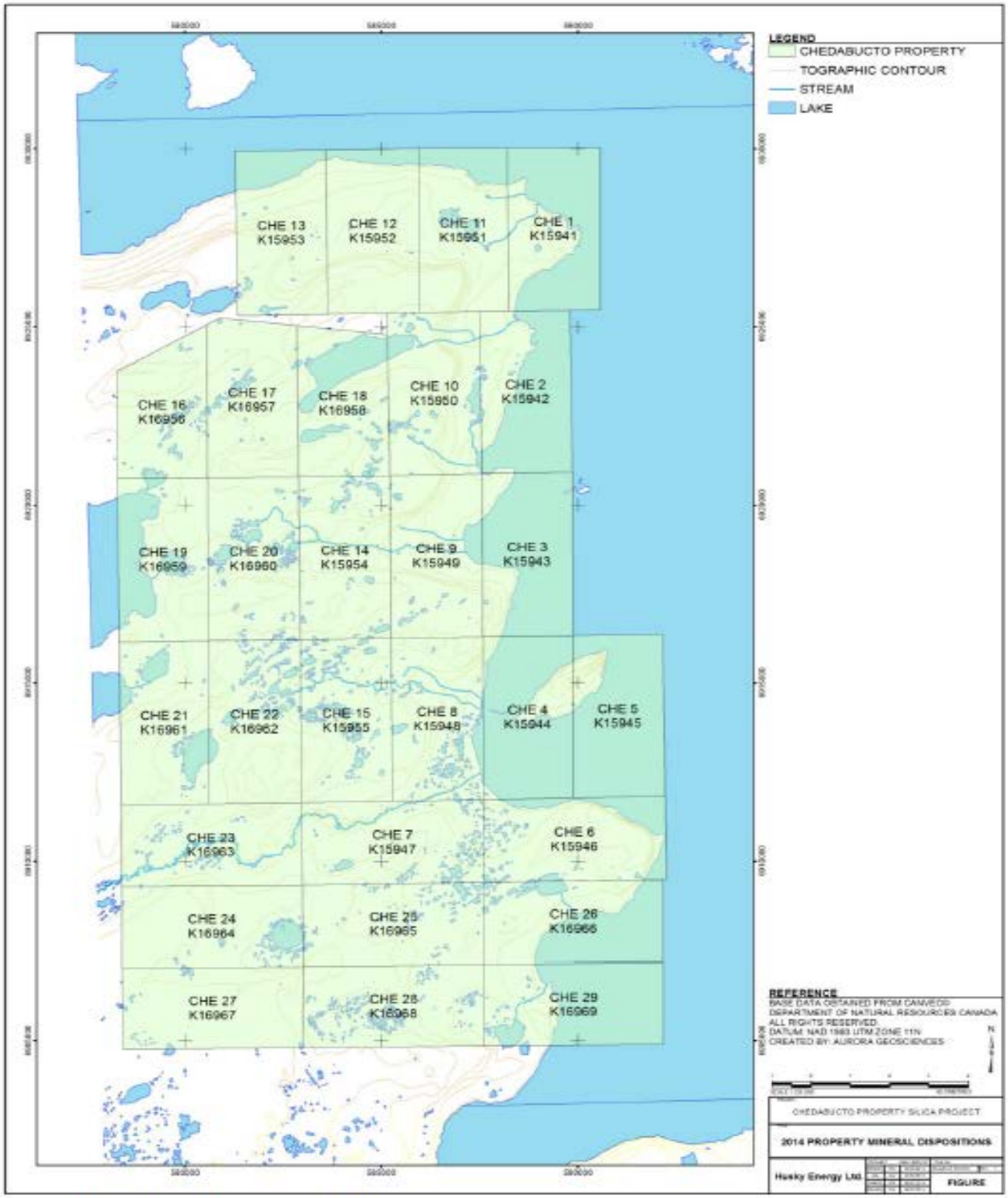



**Figure 2. Chedabucto Property mineral claims**