

Department of Geography

McGill University Burnside Hall 805 Sherbrooke Street West Montreal, Quebec, Canada H3A 0B9

Département de géographie

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Karén Kharatyan Manager of Licensing Nunavut Water Board (NWB) P.O. Box 119, Gjoa Haven, NU X0B 1J0

March 3, 2021

Re: Requesting approval for the use of waters and/or deposit of waste without a licence

Dear Dr. Karatyan,

On behalf of Dr. Wayne Pollard, Director of the McGill Arctic Research Station (MARS), I am requesting approval for the use of waters and/or deposit of waste without a licence for the McGill Arctic Research Station (MARS) on Axel Heiberg Island, Nunavut. MARS is a seasonal research facility for university professors, graduate and undergraduate students, and federal scientists. It is open in April-May and June-July for an approximate total of 45 days/year, and normally accommodates 5-6 people at any one time. Water is taken from Colour Lake, a freshwater lake that sits adjacent to MARS. Estimated water quantity is approximately 0.5 m³/day, with no evidence of draw down, erosion, disturbance or sedimentation of the lake in previous years. Approximately 0.25 m³/day of waste is deposited either in a sump (grey water) or incinerated (sewage). Both waste activities occur more than 40 m from Colour Lake or any other water body.

Please do not hesitate to contact me with any questions or concerns.

Sincerely,

Christopher Omelon, Ph.D.



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bሲ° bናናታ° Karén Kharatyan ላቦር- በት ለተጌኮበር ሲማ ነገር ውጌ ው ልቦር ሲት ነዕር bበ Lት ነገር ውና P.O. Box 119, Gjoa Haven, NU XOB 1JO

L ሩት 3, 2021

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نے ይና°ታ° J° Karatyan,

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P.O. Box 119 GJOA HAVEN, NU X0B 1J0 TEL: (867) 360-6338 FAX: (867) 360-6369 אבי ביי ביי הרבי הרבי הרבי העומעינד water board nunavut imaliriyin katimayit office des eaux du nunavut

APPLICATION FOR APPROVAL FOR THE USE OF WATERS AND/OR DEPOSIT OF WASTE WITHOUT A LICENCE

Refer to Guide 9 - Approval for the Use of Waters and/or Deposit of Waste Without a Licence.

APPLICATION NO: (for NWB use only)					
APPLICANT CONTACT INFORMATION (name, address)	2. APPLICANT REPRESENTATIVE CONTACT INFORMATION if different from Block 1 (name, address)				
Name:	Name:				
Title:	Title:				
Company:	Company:				
Address:	Address:				
Phone:	Phone:				
Fax:	Fax:				
e-mail:	e-mail:				
	(Attach authorization letter)				
3. OWNER OF THE LAND ASSOCIATED WITH	THE WATERS TO BE USED AND/OR THE				
WASTE TO BE DEPOSITED					
☐ Inuit Owned ☐ Crown	☐ Commissioner's				
4. NAME OF PROJECT (consistent with the nar	ne of the project issued by other regulatory				
agencies)	no or the project leaded by earler regulatory				
agonicios)					
					
5. LOCATION OF UNDERTAKING					
☐ Kitikmeot ☐ Kivalliq	☐ Qikiqtani				
Project Extents					
NW: Latitude: (° ' " N) Long	itude: (° ' "W)				
NE: Latitude: (° ' "N) Long	itude: (° ' " W)				
NE: Latitude: (° ' "N) Long SE: Latitude: (° ' "N) Long	itude: (° ' "W) itude: (° ' "W) itude: (° ' "W)				
SW: Latitude: (° ' "N) Long	itude: (° ' " W)				
Long					
MAP - Attach a topographical map, indicating the main components of the undertaking.					
NTS Map Sheet No.: Map Name:	Map Scale:				
Wap cheet No Wap Name	wap coalc.				

Can	p Location(s)	
	Latitude: (° ' "N) Longitude: (° ' "W)	
	e and number of the Water Management Area (Watershed) in which the Undertaking is locate se see Appendix D of the Guide and Schedule 4 of the Regulations):	d
	Name: Number:	
6.	Previous Approvals or Licences Associated with Undertaking ("Type A", "Type B" or Approval Without a Licence; it should be noted that in accordance with Guide 9, the NWB cannot issue more than one authorization for the same undertaking)	
	□ NA or	
	Previous Licence/Approval Number:	
of a	Board reminds the Applicant that as stated in s. 46 of the NWNSRTA, the expiry or cancellation by previous licence does not relieve the holder from any outstanding obligations imposed under cence.	
7.	CLASSIFICATION OF UNDERTAKING - Indicate the classification of undertaking by checking	
<i>'</i> .	one of the following boxes.	
	☐ Industrial ☐ Agricultural ☐ Mining ☐ Conservation ☐ Municipal ☐ Recreational ☐ Power ☐ Other: (describe)	
	See Appendix C of Guide 9 for descriptions of classifications of undertakings.	
8.	DESCRIPTION OF UNDERTAKING AND EQUIPMENT USED – Provide a brief description of the undertaking including a description of any equipment that will be used in using water or depositing waste.	
9.	SCHEDULE – Applicants are advised that approvals without a licence are issued for a one-year term.	
	Proposed Start Date: Proposed Completion Date: (Day / Month / Year) (Day / Month / Year)	
10.	TYPE OF USE OF WATERS WITHOUT A LICENCE PROPOSED - Check the box that	
		_

	proposed water	use, an application	roposed. If none of the v on for a water licence wi <i>Water Licence Applicat</i>	Il be required. See the	e NWB's <i>Guide</i>
	For an undertaking other than a Power undertaking and for a use of water related to the construction of a structure across a watercourse that is less than 5 metres wide at the ordinary high water mark at the point of construction.				
		For an undertaking other than a Power undertaking and for a use of water related to the training of an intermittent watercourse.			
	training of a v	For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that is less than 5 metres wide at the ordinary high water mark at the point of training.			
	For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves the infilling of the watercourse, if the watercourse has no inflow or outflow and a surface area of less than 0.5 hectares.				
	For an undertaking other than a Power undertaking and for a use of water related to the training of a watercourse that involves removal or placement of less than 100 m ³ of material.				
	For an undertaking other than a Power undertaking and for a use of water related to the construction of a temporary structure in a watercourse for the purpose of flood control.				
	For an undertaking other than a Power undertaking and for any use of water related to the storage of 2,500 m3 or less.				
	For an undertaking other than a Power undertaking and for any use of water less than 50 m³ per day.				
11. QUANTITY OF WATER INVOLVED - For each type of water use indicated in Block 10, provide the source of water, the estimated quantity to be used in <u>cubic metres per day</u> , and the periods during which water will be extracted.					
Type of Water Use indicated in Block 10		Name of Water Source(s)	Estimated Water Quantity (m³/ day)	Period(s) During which Water will be Extracted	Location of Water Source(s) (Crown/IOL)

12.	TYPE OF DEPOSIT OF WASTE PROPOSED - Check the box that applies to the type of deposit of waste proposed. If none of the deposits of waste listed below apply to the proposed deposit of waste, an application for a water licence will be required. See the NWB's <u>Guide 4 – Completing and Submitting a Water Licence Application for a New Licence</u> .				
	For an Industrial undertaking, for an activity related to hydrostatic testing or cleaning of storage tanks and pipelines, and for any deposit of waste resulting from hydrostatic testing or cleaning of unused storage tanks or pipelines.				
	For an Industrial undertaking, for an activity related to quarrying and gravel washing, and for any deposit of waste that is not deposited to surface water and that results from quarrying or gravel washing above the ordinary high water mark.				
	For a Mining undertaking, for an activity related to exploratory work, any deposit of sewage to a sump.				
	For a Power und	lertaking, any deposit of se	ewage to a sump.		
	For an Agricultural undertaking, any deposit of sewage to a sump.				
	For a Recreation	n undertaking, any deposit	of sewage to a sump.		
	For any Other type of undertaking not listed above, other than Municipal, any deposit of sewage to a sump.				
13. TYPE AND QUANTITY OF WASTE INVOLVED – For each type of waste indicated in Block 12, describe the quantity in cubic metres/day, measures to avoid or mitigate adverse impacts, and periods of deposition.					
Type of Waste Quantity to be indicated in Block deposited in m³/ day Measures to avoid Periods during which waste will be deposited					
14. SIGNATURE					
I,	on this form is to the	best of my knowledge, co	(print name), cer	rtify that the information	
g. 7 G 11 G	☐ Yes ☐ No				

OR				
I, (print name), as an authorized representative of the Applicant,, certify that the information given on this form is, to the best of my knowledge, correct and complete.				
	Yes		□No	
I certify that the Nunavut Plannii Nunavut Agreement have been	-	land use planning	requirements under Article 11 of the	
	Yes		□No	
I certify that the Nunavut Impact of the Nunavut Agreement have		development impa	act review requirements under Article 12	
	☐Yes		□No	
I certify that the proposed water further specified by column 3, in			of Schedule 2 of the Regulations that is n column 1. See list in Block 10.	
	Yes	□NA	□No	
I certify that the proposed depose 2 and 3 of Schedule 3 of the Reschedule 3. See list in Block 12	gulations, in respe		out and then further specified in columnsing that is set out in column 1 of	
	Yes	□NA	□No	
I certify that the proposed water flow of the watercourse whose w		waste will not sub	stantially affect the quality, quantity or	
	Yes		□No	
I certify that the proposed water flow of waters flowing through In			stantially affect the quality, quantity or	
	Yes		□No	
I certify that the proposed water use or deposit of waste will not affect the use of waters by a person who would be entitled to compensation under sections 58 or 60 of the <u>Nunavut Waters Nunavut Surface Rights</u> <u>Tribunal Act</u> (Act) if their use of these waters were to be adversely affected by an applicant for a licence.				
	Yes		□No	
I certify that a licence is not required for another use of water, or deposit of waste in respect of the proposed undertaking.				
	Yes		□No	
I have read and agree to comply with the following conditions outlined in sections 4(3), 5(4), 5(5) and 6 of the <i>Nunavut Waters Regulations</i> :				
1. In the case of an applicant who has a mineral right and who intends to use waters or deposit waste in relation to that right, the applicant shall respect the priority conferred on Inuit by section 62 of the				

Act as if that applicant had a licence for the use or deposit.

- 2. Measures must be taken prior to using water to minimize any alteration to the bed or banks of a watercourse whose waters are to be used, and the measures shall be maintained during the operation of the undertaking.
- 3. No waste is to be deposited to surface water or within 31 metres of the ordinary high water mark of any body of water.
- 4. The waste shall not contain more than 15 milligrams per litre of petroleum or petroleum product and must not have a visible hydrocarbon sheen.
- 5. Prior to the closure or abandonment of the undertaking or end of the period authorized for the use of water or deposit of waste without a licence, whichever occurs first, the site shall be restored to the extent practicable to the state in which it was before the use of waters and/or the deposit of waste.^a
- 6. An applicant who is authorized under the Regulations to use waters or deposit waste without a licence shall:
 - a. maintain accurate and detailed books and records of:
 - i. the quantity of water, in cubic metres, used each day,
 - ii. the quantity, in cubic metres, of waste deposited each day,
 - iii. the type of waste deposited each day,
 - iv. where the waste is deposited,
 - v. the concentration of the substance, or substances, in the deposited solid or liquid that has the effect of making the deposit waste,
 - vi. the methodology used to calculate or determine the information referred to in items (i) to (iv), and
 - vii. the measures that were taken to avoid or mitigate any adverse impacts of the deposit of waste.
 - b. keep the books and records on the site of the undertaking during the period of its operation and make them available during that period to an inspector on request;
 - c. submit to the Board a report containing a summary description and supporting photographs of the restoration of the site of the undertaking within 30 days after the earliest of (i) the day on which the undertaking is closed or abandoned, and (ii) the last day of the period authorized for the use or deposit without a licence;^b and
 - d. keep the books and records for two years after submitting the report describing the restoration of the site of the undertaking.

Notes:

^a A site need not be restored prior to the end of the period authorized for the water use and/or deposit of waste without a licence, as required by Item 5, if the Board issues a licence for the use of water or deposit of waste on that site prior to the end of that period.

^b An applicant need not submit the report referred to in Item 6 (c), to the Board if the applicant
obtains the Board's approval for a use of water or deposit of waste without a licence, or a licence
for a use of water or deposit of waste, on the same site within thirty (30) days after the last day of
the period authorized for the use or deposit.

	∐ Yes	∐ No
I understand that any approval gr	anted by the Board for the use of	water or deposit of waste without a
licence will be authorized for a pe	eriod of one year after the day on	which the Board approves the
Application. The use or deposit is	not authorized until the Board ap	pproves the Application and it is only valid
as long as the applicant is in com	ipliance with the conditions set ou	ut in the declaration above.

March 2017

	Yes	□No	
I understand that if I have answered "No" to any of the above statements a water licence is required from the Nunavut Water Board prior to the use of water or deposit of waste.			
	Yes	□No	
		COL	
Name (Print)	Title (Print)	Signature	Date

Road: hard surface, more than 2 lanes; service centre Route : revêtement dur, plus de 2 voies; centre de service Road: hard surface, 2 lanes; less than 2 lanes; snowshed Route : revêtement dur, 2 voies; moins de 2 voies; paravalanche

Highway interchange; highway route number; built-up area

Causeway; covered bridge; tunnel; bridge; moveable bridge

Boundary: unsurveyed provincial or territorial; area outline

Power transmission line; multiple lines; submarine cable Ligne de transport d'énergie; lignes multiples; câble sous-marin

Pipeline : utilisation multiple; valve de contrôle; lignes multiples

Airport or airfield; runway: hard surface; loose surface; heliport

Chimney: industrial, flare stack, burner; height; lumberyard Cheminée : industrielle, torche, brûleur; hauteur; parc à bois débités

Electric facility; oil or natural gas facility; wind-operated device Installation électrique; installation pétrolière ou gazière; éolienne

Déchet domestique; déchet liquide; dépôt de solide industriel

Terrain de golf; terrain de camping; station de ski; centre sportif

Building: unidentified buildings; religious; educational; cabin Bâtiment : bâtiments non identifiés; religieux; d'enseignement; cabine

Hospital; medical centre; senior citizens home; lodging

Waterbody or shoreline; watercourse; disappearing stream Plan d'eau ou littoral; cours d'eau; cours d'eau disparaissant

Échelle à poissons; barrage : petit; grand; portant une route

Dry river bed; sand in water, foreshore flats; intermittent lake, slough Lit de rivière à sec; sable dans l'eau, estrans; lac intermittent, bourbier

Feu de navigation; traverse; balise de navigation Coast Guard station; seaplane anchorage; marina Station de la garde côtière; mouillage d'hydravions; marina

Fish ladder; dam: small; large; carrying road

Drydock; slip; crib or abandoned bridge pier; ford Cale sèche; cale; caisson ou pilier de pont abandonné; gué

Reservoir; underground reservoir; fish pound Réservoir; réservoir souterrain; viviers dans l'eau

Rocky ledge; rocky reef; rocks in water; exposed shipwreck Barre rocheuse; récif; rochers dans l'eau; épave émergée

Moraine; glacial debris; permanent snow and ice Moraine; débris glaciaires; neige et glace permanentes

Tundra ponds; tundra polygons; palsa bog

Contour: index; intermediate; approximate

59-H/6 SCALE **1:50 000** EDITION **01** ECHELLE **1:50 000** EDITION **01**

Sand; esker; pingo; wooded area Sable; esker; pingo; région boisée

.32 Θ Depression contour; spot elevation; cave Courbe de cuvette; point coté; caverne

MONKHEAD MOUNTAIN

92°00' 91°00' 90°00' 89°00'

Wetlands: marsh, muskeg; swamp; marsh in water; string bog

Étangs de toundra; polygones de toundra; tourbière à palse

Courbe de niveau : maîtresse; intermédiaire; approximative

Terres humides : marais, muskeg; marécage; marais dans l'eau; tourbière réticulée

Dyke or seawall; wharf; breakwater Digue ou mur de protection; quai; brise-lames

Rampe de mise à l'eau; jetée

Conduit; lock; spring

Hôpital; centre médical; résidence pour personnes âgées; gîte

Customs post; ranger or warden station; cemetery Poste de douane; poste de garde forestier ou poste de garde de parc; cimetière

Aéroport ou terrain d'aviation; piste d'envol : revêtement dur; de gravier; héliport

Pipeline: multi-use; control valve; multiple lines

Pipeline underground: oil; natural gas; multi-use Pipeline souterrain : pétrole; gaz naturel; utilisation multiple

Tank; water tank; radar antenna, radio telescope Citerne; citerne d'eau; antenne radar, radiotélescope

Domestic waste; liquid waste; industrial solid depot

Golf course; campground; ski area; sportsplex

City hall; municipal hall; community centre Hôtel de ville; salle municipale; centre communautaire

Court house; correctional institute
Palais de justice; établissement correctionnel Fire station; police station; armoury Caserne de pompiers; poste de police; manège militaire

Navigation light; ferry route; navigation beacon

Aerial cableway, ski lift; sports track; arena Téléphérique, remonte-pente; piste de course; aréna

Silo; grain elevator; clearance tower Silo; élévateur à grains; tour de dégagement

Tower: communication; fire; control

Lookout; historic site; ruins; zoo

Lookout; historic site; ruinis; 200
Belvédère; lieu historique; ruines; zoo

Mine; pit: sand, gravel, clay; quarry Mine; sablière, gravière, glaisière; carrière

Limite : provinciale ou territoriale non arpentée; surface délimitée

Chaussée; pont couvert; tunnel; pont; pont mobile

Échangeur routier; numéro de route; agglomération

Railway, abandoned; railway yard Chemin de fer, abandonné; gare de triage

Rapid transit: rail; road; footbridge Transport rapide : voie ferrée; route; passerelle

Boundary: administrative; recreational Limite : administrative; récréative

Boundary: geographic; unsurveyed geographic Limite : géographique; géographique non arpentée

Boundary: international Limite : internationale

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Boundary: provincial or territorial
Limite : provinciale ou territoriale

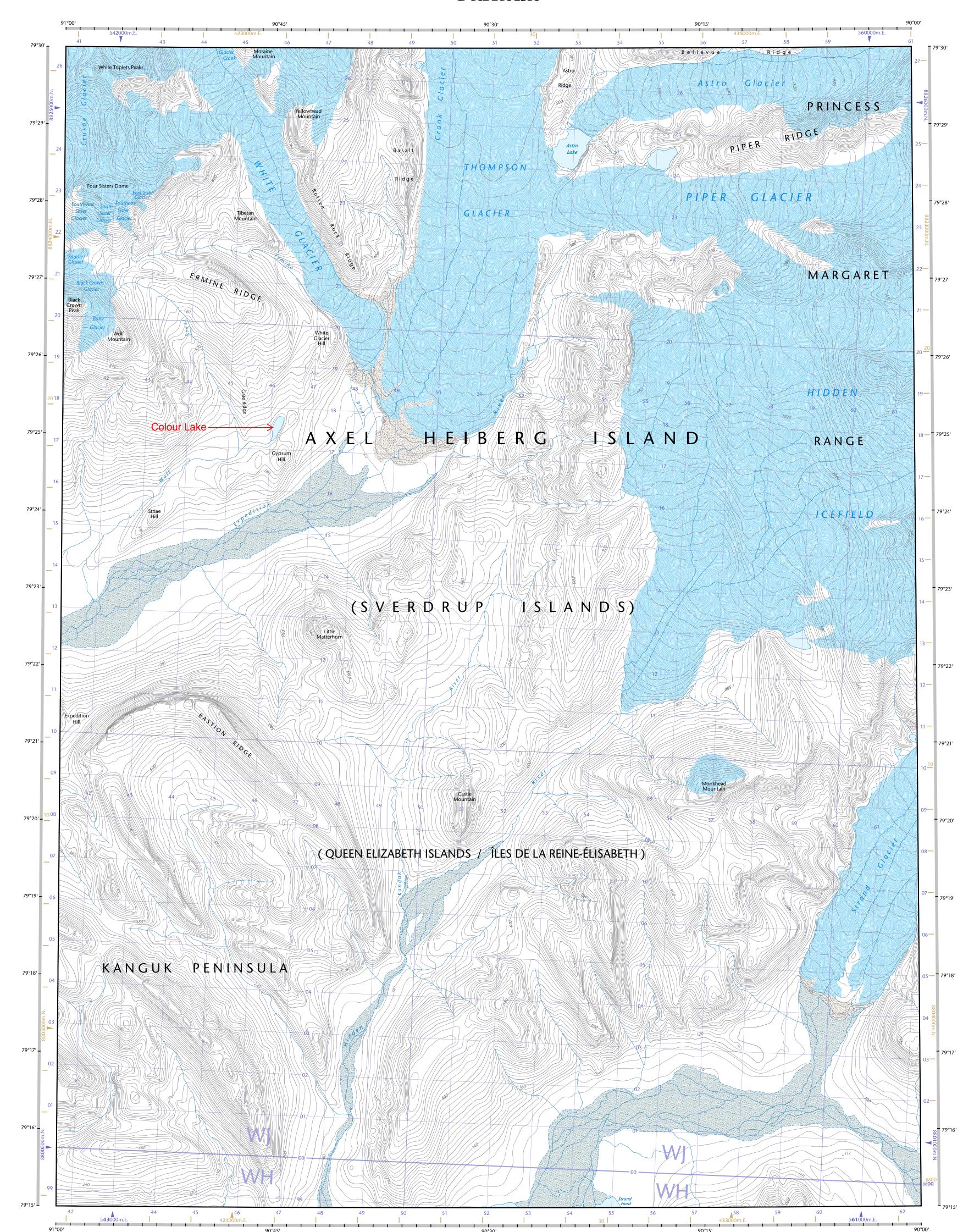
Fort, mur; clôture

Pipeline: oil; natural gas Pipeline : pétrole; gaz naturel

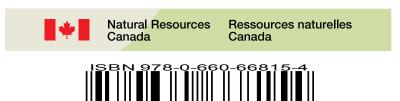
Road: hard surface, street; loose or stabilized surface, street; conduit bridge Route : revêtement dur, rue; de gravier, aggloméré, rue; pont de canalisation

Road: loose or stabilized surface, all season, 2 lanes or more; less than 2 lanes Route : de gravier, aggloméré, toute saison, 2 voies ou plus; moins de 2 voies Road: loose surface, dry weather; vehicle track or winter road; trail; portage Route : de gravier, temps sec; chemin de terre ou d'hiver; sentier; portage

Railway, single track; railway station; trestle; multiple tracks; turntable Chemin de fer, voie unique; gare; chevalet; voies multiples; plaque tournante



Maps/Cartes du Canada



Produced on February 23, 2012, by the Centre for Topographic Information, Natural Resources Canada. Établie le 23 février 2012, par le Centre d'information topographique, Ressources naturelles Canada. The paper copy of this map meets the print quality standards of Natural Resources Canada when it bears a Certified Map Printer holographic label. La copie papier de cette carte respecte les normes de qualité d'impression de Ressources naturelles Canada

quand elle porte l'étiquette holographique de l'imprimeur

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Map content validity dates Road network, Absent • Hydrographic network, 2008 Vegetation, Absent Buildings, Absent Boundaries, Absent • Toponymy, 2004 - 2012

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This map is not to be used for air or marine navigation.

· Réseau routier, Absent • Réseau hydrographique, 2008 Végétation, Absent Bâtiments, Absent • Limites, Absent • Toponymie, 2004 - 2012 Consultez les métadonnées détaillées sur : http://GeoGratis.gc.ca Pour toutes corrections, additions ou commentaires concernant le contenu de cette carte, veuillez contacter Ressources naturelles Canada par courrier électronique à : cartes.topo@RNCan.gc.ca Visitez notre site Web: http://cartes.RNCan.gc.ca

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aérienne ou maritime.

Dates de validité du contenu de la carte

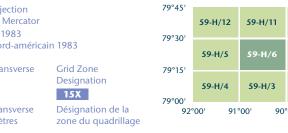
Scale 1:50 000 Échelle 1 centimetre on the map represents 500 metres on the ground 1 centimètre sur la carte représente 500 mètres au sol Contour Interval: 20 metres Équidistance des courbes : 20 mètres Elevations in metres above Mean Sea Level Altitudes en mètres au-dessus du niveau moyen de la mer Contours on or surrounding glaciers are approximate Les courbes de niveau sur ou à proximité des glaciers sont approximatives

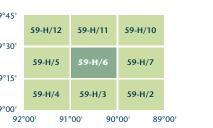
MONKHEAD MOUNTAIN

Use diagram only to obtain numeric values (1001 mils) 2°27' 100 000 metre Square ★ (43 mils) Identification Approximate Mean Declination 2012 for centre of map Identification du carré Annual change decreasing 90.6' de 100 000 mètres N'utiliser le diagramme que pour obtenir les valeurs numériques Déclinaison moyenne approximative au centre de la carte en 2012 Variation annuelle décroissante 90.6' For magnetic declination information, visit: http://gsc.NRCan.gc.ca/geomag Pour information sur la déclinaison magnétique, visitez : http://cgc.RNCan.gc.ca/geomag à partir de la grille UTM sur : http://cartes.RNCan.gc.ca/topo101 The magnetic compass may be erratic in this region

Projection transverse de Mercator North American Datum 1983 Système de référence nord-américain 1983 1000 metre Universal Transverse Grid Zone Mercator Grid Designation Zone 15 15X Quadrillage universel transverse Désignation de la de Mercator de 1000 mètres A tutorial on how to estimate position from the UTM grid can be found at: http://maps.NRCan.gc.ca/topo101

Consultez le tutoriel sur la manière d'évaluer la position





Printed map / Carte imprimée

Cat. no. / No de cat. M116-2/059H06

ISSN 1915-884X



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