



24 April 2017

Mr. R. Barry
Nunavut Impact Review Board
PO Box 1360
Cambridge Bay, NU
X0B 0C0

Dear Mr. Barry:

RE: Nanisivik Naval Facility (NNF) Construction 2016 Annual Report

References:

- A. Land Use Permit N2014N0020*
- B. Water Use Licence 8BC-NNF1418*
- C. NIRB 09DN018*

Defence Construction Canada on behalf of the Department of National Defence is providing the following annual report, which summarizes the activities in 2016 and outlines the planned activities for 2017.

Summary of 2016 Activities

1. Production of ~ 3700 cu.m of armour stone (details in Annex A, NNF – 2016 Annual Quarry Report);
2. Progressive reclamation throughout the quarrying operation;
3. Naval Facility Site Access roads upgrades and maintenance;
4. Construction camp operation and maintenance activities;
5. Naval Distillate infrastructure – facility containment, liner, and foundation;
6. Diesel tanks, POL Storage Area and containment infrastructure;
7. Operational Area infrastructure;
8. Pipe rack infrastructure;
9. Wharf;
 - a. Sheet pile work
 - b. cathodic protection installation
10. General Use Warehouse installation (foundation & structure);
11. Electrical House modular installation (prefabricated);
12. Wharf Operator Shelter installation (prefabricated);
13. Upgrades to the existing DND site office;

Local Hires – 22 individuals for a total of 7585 hours

Contracting opportunities

Arctic Bay Companies = \$221,295.06

Baffin Region Companies = \$748,291.84

The construction contractor offered on the job training (Inuit workers were paired with an experienced worker and closely supervised), and tool box meetings for specific site procedures training.

Work Plan for 2017

The proposed work plan for the 2017 season includes:

1. Naval Facility Site Access roads upgrades and maintenance;
2. Construction camp operation and maintenance activities;

3. Naval Distillate infrastructure – facility containment, liner, and foundation
4. Diesel tanks, POL Storage Area and containment infrastructure
5. Operational Area infrastructure
6. Wharf upgrades
7. Foundation for the Spanwire System

Compliance with NIRB Terms and Conditions

The NNF project has endeavoured to comply with all terms and conditions required by authorizing bodies and applicable Acts, Regulations and Guidelines.

- All camp fuel was stored using adequate secondary containment located more than 30 m from any water body. Appropriate spill response equipment was readily available, and fuel was routinely inspected by properly trained personnel.
- No damage to wildlife habitat or harassment of wildlife occurred. All project personnel were trained in wildlife protective measures. There has been no disturbance or destruction to nests or eggs of any birds. There has been no disturbance to Caribou and muskox. (See Annex B - Wildlife Log)
- All aircraft flight restrictions have been adhered to.
- During aggregate production dust suppression methods were utilized, and no sediment was deposited into any water body.
- The construction camp was erected on a prepared gravel pad, and there is no camp, equipment or material stored on the surface of lakes or streams.
- At the conclusion of the 2016 field season all garbage was removed from site.
- The project activities did not interfere with Inuit wildlife harvesting or traditional land use activities.
- A comprehensive description of Community Consultations cannot be provided at this time; the scheduled Community Consultations will occur 11 April 2017, a description of this meeting will be provided in the 2017 Annual Report.

We trust the information provided is sufficient for your records. Please feel free to contact the undersigned if you have any questions or comments.

Sincerely,



Tamara Van Dyck BSc
Environmental Project Coordinator
Defence Construction Canada
(613) 995-9741

Tamara.VanDyck@dcc-cdc.gc.ca

cc. Rodney Watson, NNF DND Project Manager, RODNEY.WATSON@forces.gc.ca
Louis Lemay, Technical Specialist, Project Management, louis.lemay@dcc-cdc.gc.ca
Brian Gallant, Coordinator, Construction Services, Brian.Gallant@dcc-cdc.gc.ca
Marc Deschênes, Almiq Project Manager, mdeschenes@almiq.com



Figure 1. Operational Area



Figure 2. Naval Distillate Tank Construction



Figure 3. Diesel Tank Containment Construction



Figure 4. Pipe Rack Infrastructure



Figure 5. NNF Site July 2016

ANNEX A
NNF – 2016 Annual Quarry Report

ALMIQ CONTRACTING LTD.

SHOP DRAWING / SAMPLE / PRODUCT DATA

IDENTIFICATION FORM

T : 418-668-3321
F : 418-668-0652

1340, Ulu Lane, P.O.
Box 2140, Iqaluit, NU
X0A 0H0

PROJECT : CONSTRUCTION OF NANISIVIK NAVAL FACILITY, NU			Submittal NO.	SUB-ALM-DCC-371		
OWNER : DEFENCE CONSTRUCTION CANADA			Revision NO.	0	Date:	2017-03-27
			Revision NO.		Date:	
PROJECT NO. : NPO1301	CONTRACT NO. : 55668 CN	OUR FILE NO. : 148926	Revision NO.		Date:	
			Revision NO.		Date:	

DISCIPLINE :	
CONTRACTOR /SUB-CONTRACTOR :	
Almiq Contracting LTD	
1340, Ulu Lane, PO Box 2140	
Iqaluit (NU) X0A 0H0	
Person in Charge : Marc Deschênes	
Phone : 418-668-3321.214 Fax :	
MANUFACTURER :	SUPPLIER :
Rolls-Royce	
Person in Charge :	Person in Charge :
Phone : Fax :	Phone : Fax :
SHOP DRAWINGS, PRODUCT DESCRIPTION OR SAMPLE SUBMITTED FOR APPROVAL:	SPECS REFERENCE :
Annual Report – Land use Permit Report 2016	
NOTES :	

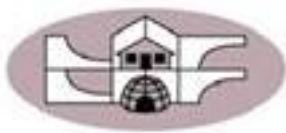
We declare that we have verified the attached documents and/or sample, that they are in compliance with the contract documents and are approved for the construction of the project.

Marc Deschênes Ing., Project Manager
Contractor's Representative

Signature

2017-03-27

Date _____



ALMIQ CONTRACTING LTD

130, Notre-Dame St. West, Alma (Qc), G8B 2K1

Tel: (418) 668-3321

Fax: (418) 668-0652

Nanisivik Naval Facility

Annual Report for Land Use Permit

2016 Construction Season

Prepared by **Almiq Contracting Ltd.**

March 27th 2017

CONTENTS

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OVERVIEW

This document refers to the conditions annexed to the Land Use Permit N2014Q0024 issued December 1st 2014 by Aboriginal Affairs and Northern Development Canada, for the purpose of the Nanisivik Naval Facilities project. These annexed conditions define the responsibilities and the obligations of the permittee associated with quarrying activities. Among these conditions, the Section 31 (1) (b) – 8 sets the requirements for producing an annual report, as follow:

"The Permittee shall submit an annual report to the Engineer by March 30th of each year of permitted activities. The annual report must contain, but not limited to, the following information:

- a) A summary of activities undertaken for the year including*
- b) A map showing the following items with exact coordinates (Degrees/min/sec, in NAD 83):*
 - i. All camp locations*
 - ii. Air strip and landing location*
 - iii. All drilling locations*
 - iv. All fuel caches*
 - v. Any other location where activities were conducted*
- c) A work plan for the following year, including any progressive reclamation work undertaken. "*

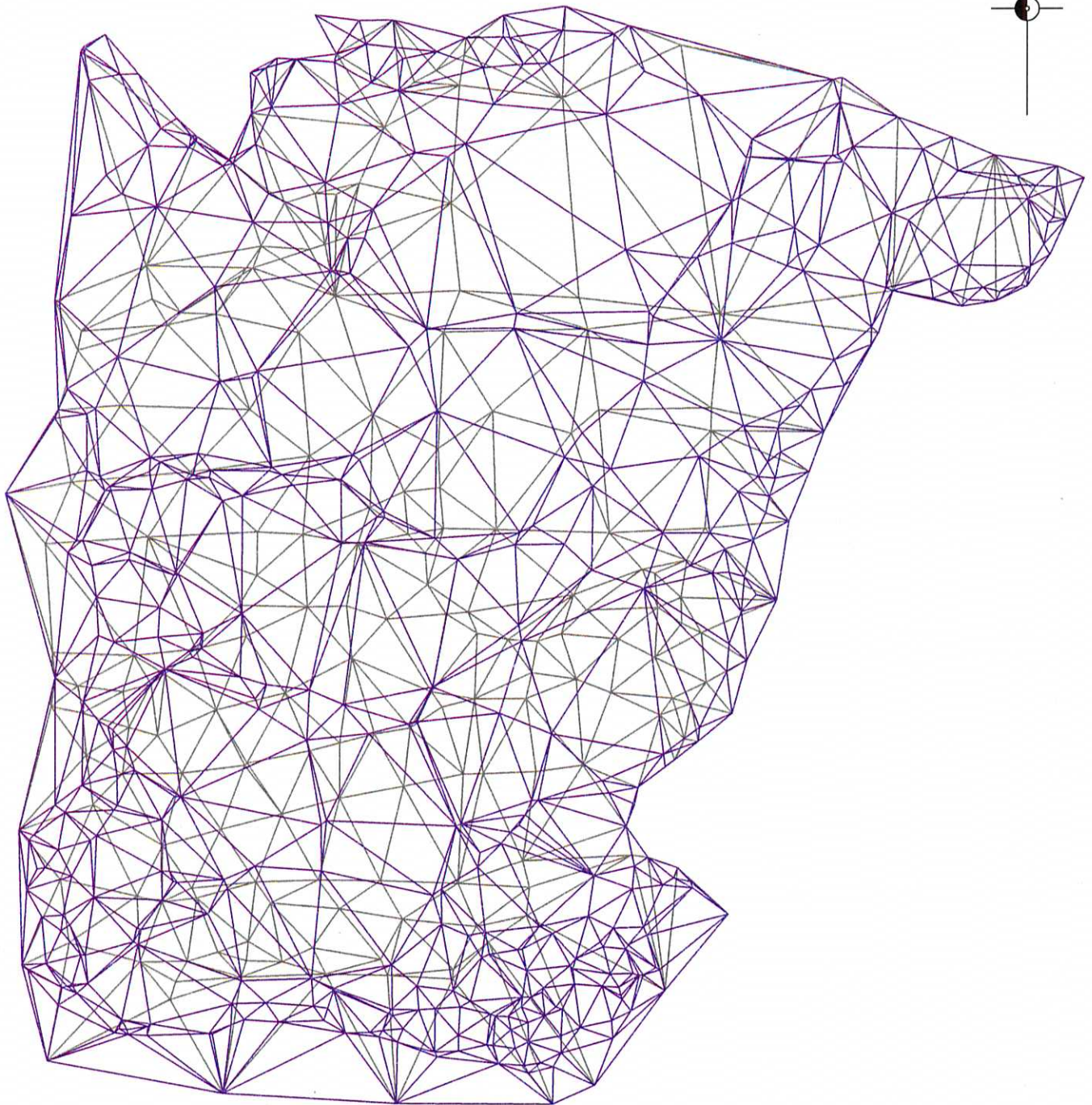
The intent of this report is to provide a description of quarrying activities undertaken in 2016, to reflect the current site organisation and the planned operations for 2017 construction season.

ACTIVITIES UNDERTAKEN IN 2016

The activities undertaken at the Nanisivik quarry in 2016 are summarised as follows:

- **Production of ~ 3700 cu.m of armour stone** (July 14th to September 2nd)

A total of 15 blasts were conducted in 2016 at the Nanisivik quarry for the production of armour stone. Blasting operations were followed by sorting the rock by size, hauling the selected material to the construction site where a 3399 cu.m stockpile of armour stone was built at South-East corner. An estimated volume of 300 cu.m of armour stone was used for the completion of shoreline protection works.



VOLUME: 3 399 CUBIC METERS

VOLUME CALCULATION

PROJECT NANISIVIK – STOCK PILE

DESCRIPTION: ARMOUR STONE

UPPER SURFACE : TOP OF THE STOCK PILE
(SURVEYED ON AUGUST 30, SEPT. 1 & 7, 2016)

LOWER SURFACE : STOCK PILE PERIMETER & BASE SURFACE
(SURVEYED ON AUG. 16, 18, 19 & 29, SEPT. 1 & 7, 2016)

SIGNED IN JOLIETTE, ON : SEPTEMBER 9, 2016

BY :  QUEBEC LAND SURVEYOR
JÉRÔME HARNOIS



712, rue Richard
Joliette (Qc), J6E 2T7
Téléphone: (450) 753-3874
Télécopieur: (450) 755-4754

Measurements written on this plan are in meters (I.S.U.)

MINUTE : 6554

FILE : 0301-0031

JOB : 70135

SCALE : 1:300

SURVEYED BY : Y.H.P & B.ARBOUR

COPY CORRESPONDING TO THE ORIGINAL

ISSUED ON :

BY :
QUEBEC LAND SURVEYOR

DRAWN ON : SEPTEMBER 9, 2016

- **Progressive reclamation** (Throughout the quarrying operation)

The excess blasted material was used to dress the exposed face of the quarry in a manner to obtain a minimum of 2:1 slopes and a maximum of 10m exposed quarry face. Throughout the operation, debris and waste materials were removed from the working area and disposed of. Due to weather conditions prevailing in early September, the completion of the quarry reclamation was delayed to 2017.

- **Demobilization of drilling equipment and explosive contrainers** (September 3rd to September 5th)

Following the end of blasting operations, the drill was demobilised from the quarry with the two remaining explosive warehouses. There is currently no drilling or crushing equipment left at the quarry or the construction site, except the primary screener (scalper) left for the 2017 sand washing operation.

CURRENT SITE ORGANISATION

The following map gives details on the requested items location:



PS:

- The map doesn't show any fuel storage area since the fuel is transported from Arctic Bay to the construction site with a fuel truck.

WORK PLAN FOR 2017 PHASE

The activities planned for 2017 can be summarised as follow:

- Quarry final reclamation: (5-7 days)


The remaining quarry reclamation shall be undertaken as per conditions prevailing in the land use permit and as per quarry management plan. This will include but not limited to:

- Dress the slopes with non-used blasted material
- Leave the exposed faces of the quarry to a 10m maximum height. Ensure that the faces are stable
- Clean the quarry area from debris produced such as explosives bags, but also items such as drilling bits.
- Perform a final site grading to prevent water from ponding, surface erosion and siltation
- Leave the worked areas of the quarry in a neat and tidy condition

A volumetric estimate for the quantity of bulk material (non-used blasted rock) remaining at the quarry will be provided.

ANNEX B

Nanisivik 2016 Wildlife Log

 ALMIQ CONTRACTING LTD.	SHOP DRAWING / SAMPLE / PRODUCT DATA IDENTIFICATION FORM	T : 418-668-3321 F : 418-668-0652
		1340, Ulu Lane, P.O. Box 2140, Iqaluit, NU X0A 0H0

PROJECT : CONSTRUCTION OF NANISIVIK NAVAL FACILITY, NU			Submittal NO. SUB-ALM-DCC-376	
OWNER : DEFENCE CONSTRUCTION CANADA			Revision NO. 0	Date: 2017-04-05
PROJECT NO. : NPO1301	CONTRACT NO. : 55668 CN	OUR FILE NO. : 148926	Revision NO.	Date:
			Revision NO.	Date:

DISCIPLINE :	
CONTRACTOR /SUB-CONTRACTOR : Almiq Contracting LTD 1340, Ulu Lane, PO Box 2140 Iqaluit (NU) X0A 0H0 Person in Charge : Marc Deschênes Phone : 418-668-3321.214 Fax :	
MANUFACTURER :	SUPPLIER :
Person in Charge : Phone : Fax :	Person in Charge : Phone : Fax :
SHOP DRAWINGS, PRODUCT DESCRIPTION OR SAMPLE SUBMITTED FOR APPROVAL:	SPECS REFERENCE :
Annual Report – Wildlife Register 2016	Health and Safety Plan Section 01 35 29.06 Art. 1.12
NOTES :	

We declare that we have verified the attached documents and/or sample, that they are in compliance with the contract documents and are approved for the construction of the project.	
Marc Deschênes Ing., Project Manager Contractor's Representative	
_____ Signature	2017-04-05 _____ Date

Wildlife

All staff arriving at the site for any phase of the Project will receive orientation on Wildlife Mitigation and Monitoring Plan. The orientation will include educating workers on wildlife that can be anticipated at the site (mammals, birds, marine mammals), measures they are responsible for upholding, reporting and general practices enforced to limit disturbance to nearby wildlife and maintain health and safety of workers.

It is forbidden to feed, approach, or harass wild animals, including animals moving through work zones or campsites. It is also forbidden to store food outside the camp and to throw away food outside.

Feeding wild animals will decrease the animals desire to hunt for itself and its young, impacting their and future generations' ability to survive. Harassing wild animals could interrupt life cycles, impacting future development of the wild animal populations.

Recyclable material will be separated from other waste, compacted and stored for off-site transport. Solid waste suitable for incineration will be incinerated on-site on a daily basis.

Flights to and from the helicopter landing area are not expected for the project, but if need be, they will follow an established flight corridor to reduce disruption to nearby wildlife and avoid known wildlife movement corridors.

It is also forbidden to hunt or trap.

In the event that wildlife is present in the vicinity, work will cease until the wildlife has moved out of the immediate area. Workers should seek out a safe location and distance themselves from the animal(s) if safe to do so. At no time shall any worker attempt to scare away the wildlife, but shall let it leave the vicinity on its own.

Every encounter has to be reported to the General Contractor and kept in a logbook.

Polar Bears

There will be a wildlife monitor permanently on the worksite. Two Inuit recruited in the community of Arctic Bay will assume this role. They will have their Wildlife monitor's license/course. Wildlife monitors will patrol the camp zone, work zones and career zone in a 4 x 4 side by side type vehicle. They will also be provided with a firearm. In case of intrusion of a polar bear near the work zone, the wildlife monitor will apply the appropriate measures to scare or keep away the polar bear from the site. If an animal had to be shot down, the Wildlife monitor will report the facts to the General Contractor, who will contact the local authorities to indicate the place and time of the event. Weapons are stored at the camp in a cabinet designed for this purpose and will be locked at all times.



ALMIQ CONTRACTING LTD.

Month / Mois : June

Wildlife register
Registre de la faune



Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
June 8 2016	4:39	Nanisivik	Seagull, Rabbit, seal	seek out a soft location
June 13	7:15	Nanisivik	Seagull, Raven, Seal	Just obsrb
June 14/16	7:30	Nanisivik	Rabbit, Seagull, Seal	Just obsrb
June 15/16	7:36	Nanisivik	Seagull, Seal	obsrb
June 17/16	7:25	Nanisivik	Seagull, Seal	watch it goes
June 18/16	7:18	Nanisivik	Raven, Seal	Just obsrb
June 20/16	7:15	"	Loon, Seal pup, Seal	"
June 21/16	7:25	"	Geese, Loon, Seal	"
June 22/16	7:20	"	Seal, Raven, Seagull	"
June 23/16	7:20	"	Seal, Seagulls	"
June 24/16	8:30	"	Fox	"
			Snowy owl, Seal, Seagull	"

Prepared by / Préparé par : Mike Kigutag

Approved by / Approuvé par : MARC DESCHAMPS

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By/Par :



ALMIQ CONTRACTING LTD.

Wildlife register
Registre de la faune



Month / Mois :

June - July

Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
25/06/16	7:00	Nanisivik	Seagulls, baby Rabbit, sea	watched & pictured
26/06/16	7:20	Nanisivik	Seal, Seagull, Raven	Just observe
27/06/16	7:15	Nanisivik	Seal, Seagull, Duck	watch direction
06-28-16	7:30	Nanisivik	Seal, Loon, Seagull, Raven	Just observe
06-29-16	7:15 am	Nanisivik	Seal, Geese, Loon, Rabbit	Just watch
07-01-16	7:30 am	Nanisivik	Falcon, Raven, Rabbit, Seagull	observe
07-02-16	7:10 am	Nanisivik	Raven, Seagull	Keep watch
07-04-16	1:15 pm	Nanisivik	Duck, Seal, Seagull	Watch direction
07-05-16	9:25 am	Nanisivik	Narwhal, Seal, Seagull	No measures taken
07-06-16	7:25 am	Nanisivik	Seal, Seagull, Loon, Duck	No measures taken
07-07-16	11:15 am	Nanisivik	Seal, Raven	Just observe

Prepared by / Préparé par :

Mike Kightag

Approved by / Approuvé par :

MARC DESCHAMPS

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Wildlife register
Registre de la faune

Month / Mois : July 2016

Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
07-08-16	6:48 am	NNF	Fox, Seal, Seagull	No measures taken
07-11-16	7:30	NNF	Seal, Seagull, Loon	Just observe
07-12-16	7:30 am	NNF	Fox, Rabbit, Seal, Seagull, Loon	Just observe
07-13-16	8:43 AM	NNF	Rabbit, Seagull, Fox	Just watching
07-14-16	9:03 AM	NNF	Rabbit, Seagull, Duck, Seal	Just observe
07-16-16	7:07 PM	NNF	Seagull- Seal - Loon	Just observe
07-17-16	2:45 PM	NNF	Narwhal, Seal, Seagull, Rabbit	No measures taken
07-18-16	9:30 PM	NNF	Seal, Seagull, Narwhal	No measures taken
07-19-16	8:32 PM	NNF	Duck	Just watching
07-22-16	8:45 PM	NNF	Narwhal, Seagull, Seal	No measures taken
07-22-16	8:00 AM	NNF	Seal, Seagull, Duck	Just observe

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ALMIQ CONTRACTING LTD.

Month / Mois : July 2016

Wildlife register
Registre de la faune



Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
07 23 16	7:03 PM	Nanisivik	Seagull, Rabbit,	Just watching...
07 28 16	8:28 AM	Nanisivik	Seagull, Rabbit, Fox	Just watching Them.
08 03 16	11:33 AM	Nanisivik	Seagull Rabbit, Seals	Just watching Them
08 04 16	10:41 AM	Nanisivik	Seagull, Seals, Rabbit Polar Bear	Just watching Them
08 08 16	8:21 AM	Nanisivik	Seals, Seagull Rabbit Arctic Fox	Just observe
08 10 16	9:04 AM	Nanisivik	Seals, Seagull Rabbit	Just observe
08 11 16	1:12 PM	NAN	Seals, Seagull, Duck, Rabbit	Just watching Them
08 12 16	12:29 PM	Nanisivik	Seals, Seagull Duck Arctic Fox Rabbit Loon	Taken measures
08 13 16	12:00 PM	Nanisivik	Seals, Seagull, Duck Arctic Fox, Rabbit	Just watching Them
08 14 16	9:45 am	Nanisivik	Narwhals, Seal Raven	Just observe
08 15 16	8:25 am	Nanisivik	Narwhals, Seal, Seagull Loon.	No measures taken

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ALMIQ CONTRACTING LTD.

Month / Mois : August 2016

Wildlife register
Registre de la faune

Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
08-16-16	10:45 am	Nanisivik harp seal, Seal, Raven	harp seal, Seagull, Loon	Just observe
08-17-16	8:45 am	FOX Nanisivik	Fox, Seagull, Raven	No measures taken
08-19-16	10:53 AM	Nanisivik	Arctic Fox, Seagull, Raven, Seal Ducks, bird	No measures taken
08-20-16	11:03 AM	Nanisivik	Arctic Fox, Seagull, Raven, Seal Duck Loon	Just observe
08-22-16	6:34 PM	Nanisivik	Seagull, Duck, Raven	Just observe
08-22-16	11:15 am	Nanisivik	Polar Bear, Seal, Seagull Raven, Fox, Loon	look out
08-23-16	9:50 am	Nanisivik	Seal, Fox, Seagull	No measures taken
08-24-16	1:55 PM	Nanisivik	real fox, seagull	No measures taken
08-25-16	10:15 AM	Nanisivik	Fox	
08/25/2016	8:15 PM	Nanisivik	Seals Rabbit, Seagull, Raven, Loon	Just watching them!
08/26/16	2:25 PM	Nanisivik	Loon Seal	look out for

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ALMIQ CONTRACTING LTD.

Wildlife register
Registre de la faune



Page 1 de 2

Month / Mois : August 2016

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
08-29-16	5:54 AM	Nanisivik	Seals, Seagull, Rabbit, Duck	look out!
08-29-16	1:24 PM	Nanisivik	FOX	Just observe
08-31-16	7:48 PM	Nanisivik	Seals, Seagull, Rabbit, Loon	No taken measures
09-02-16	1:22 AM 3:55 AM	Nanisivik	Arctic Fox	Just observe
09-03-16	4:20 AM	Nanisivik	Arctic Fox	look out
09-04-16	2:35 PM	Nanisivik	Fox, Seal, Seagull, Duck	No measures taken
09-06-16	1:30 PM	Nanisivik	Arctic Fox	look out
09-06-16	9:37 PM	Nanisivik	Rabbit, Arctic Fox, Seagull	No measures taken
09-07-16	3:30 PM	Nanisivik	Fox, Seal, Seagull	Just observe
09-07-16	8:35 PM	Nanisivik	Seagull, Seals, Rabbit, FOX	Just observe
09-12-16	8:35 PM	Nanisivik	Falcon, Geese, Fox	Just watch

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ALMIQ CONTRACTING LTD.

Month / Mois : 09 2016

Wildlife register
Registre de la faune



Page 1 de 2

Date/Date	Time /Heure	Location/Endroit	Wildlife type /Type d'animal	Measures taken / Mesures prises
09-15-16	3:00 PM	Nanisivik	Seal's Seagull,	look out!
09-18-16	3:00 PM	Nanisivik	Seagull, Seal's	Just Watch Them
09-18-16	3:00 PM	Nanisivik	Seagull, Seal's, Arctic Fox, Rabbit, Loon, Ducks	No Taken Measures
09-19-16	7:43 AM	Nanisivik	Seagull, Seal's	look out!
09-20-16	11:55 AM	Nanisivik	Seagull, Seal's, Fox, Ducks, Bird	No Taken Measures
09-21-16	13:40 PM	Nanisivik	Seagull, Seal's, Ducks, Bird, Seal's	Just Watch Them
09-22-16	11:14 AM	Nanisivik	Seagull, Seal's, Rabbit	looking out! lol

Prepared by /Préparé par :

Andy Issigaitok

Approved by /Approuvé par :

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Date/Date :

By/Par :

MARC DESCHAMPS