March 7, 2019 W2018L2-0002, W2018L2-0003

Joseph Mackenzie, Chair
Wek'èezhìı Land and Water Board
#1-4905 48th St.
Yellowknife, NWT X1A 3S3

WATER USE PLAN FOR THE NIGHTHAWK GOLD CORP INDIN LAKE GOLD PROPERTY, VERSION 1.1

Dear Mr. Mackenzie,

Nighthawk Gold Corp. (Nighthawk) submits the following Water Use Plan for approval by the Wek'èezhìı Land and Water Board (WLWB), pursuant to W2018L2-0002 and W2018L2-0003 (Part D Item 2). This purpose of this document is to outline planned water withdrawal for camp use and drilling. This Version 1.1 of the Water Use Plan includes updates requested by the WLWB in the Reasons for Decision dated 1 March 2019.

As required by Water Licence W2018L2-0003 (Part D Item 2) the Water Use Plan is to include:

a. Name and location of the lake(s) to be used as a Water Source;
b. Anticipated daily withdrawal volumes and duration of use, including a comparison of the total water volume requested for use against the total water volume available;
c. Any available bathymetric information, including maximum depths;
d. Any available information on other water uses from the source(s).

This information is provided in the sections below, as well as other information relevant to conditions under Part D of the water licences.

Water use shall not exceed 179 m^3 for sources licenced by Water Licence W2018L2-0002 (territorial waters), and 120 m^3 for sources licenced under W2018L2-0003 (federal waters).

Names and Locations of the Water Sources

The table below includes the water source lake names and locations.

Water Source Name	Approximate centroid (DDD° MM' SS")	NTS Mapsheet	Surface area* (m^2)	Mean depth (m)	Maximum depth (m)	Water Licence
Baton Lake	64° 22' 40"N 115° 05' 40" W	086B06	1,700,000 (Beak 1989)	10.0 (Beak 1989)	>35 (Beak 1989)	W2018L2-0002

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Water Source Name	Approximate centroid (DDD° MM' SS")	NTS Mapsheet	Surface area* (m^2)	Mean depth (m)	Maximum depth (m)	Water Licence
Steeves Lake	64° 23' 38" N 115° 07' 02" W	086B06	1,580,000 (Beak 1989)	5.5 (Beak 1989)	>20 (Beak 1989)	W2018L2-0002
Indin Lake	64° 14' N 115° 08' W	086B03	164,597,116	34.8 ** (Falk 1979)	71.0 ** (Falk 1979)	W2018L2-0003
Spider Lake	64° 30' N 115° 08' W	086B11	16,138,324	Unknown	Unknown	W2018L2-0003

*Lake surface area was computed using Global Mapper v18.0 GIS software from publicly available 1:50,000 scale CanVec hydrographic feature data published by Natural Resources Canada (2017) unless otherwise indicated.

** Depths originate from 36 depth measurements over transects totaling 11.8 km, in an approximately 5 km^2 area of eastern Indin Lake

Anticipated Daily and Total Withdrawal

The anticipated water use for the proposed March and April 2019 drilling program is estimated as follows:

- The drilling program will extend from March 10 to April 27, requiring up to 21 days of drilling water from Indin Lake, and 27 days of drilling water from Spider Lake.
- The daily drill water use is estimated at up to 31.04 m^3 per drill per day. When all three drills are operational, maximum water withdrawal will be 93.12 m^3 per day. This is below the limit of 120 m^3 per day as required by W2018L2-0003 Part D Item 1.

Using these estimates, the maximum daily and total water use for three drills during March and April 2019 is presented in the table below.

Source	Daily withdrawal per drill (m^3)	Maximum total daily withdrawal for three drills * (m^3)	Duration of drilling program (days)	Maximum anticipated withdrawal (m^3)
Baton Lake	31.04	93.12	27	2,514.24
Indin Lake	31.04	93.12	21	1,955.52
Spider Lake	31.04	93.12	27	2,514.24

* Nighthawk will have a maximum of three drills in operation, thus the daily withdrawal estimates from lakes are not additive.

Steeves Lake is used as a source for camp water, at an estimated 5 m^3 per day. Assuming the camp will be open for 240 days, anticipated withdrawal is 1,200 m^3 in 2019. Steeves Lake is assumed to be ice-covered for the first 120 days.

Available Bathymetric Information

Several sources were searched for available bathymetric information on Indin Lake and Spider Lake. This included Beak (1989), EBA (2009), Falk (1979), Gartner Lee (2008), Golder (1988), Pacific Ecological (2004), Puznicki (1996, 1997). From these, relevant information from Indin Lake was identified in Falk (1979) and from Steeves and Baton lakes in Beak (1989). Some limited information on Spider Lake was provided in EBA (2009).

Comparison of Water Requested with Water Available

The table below provides the estimated lake volumes, estimated below-ice volume (using an ice volume maximum thickness of 1.5 metres [DFO 2010]), anticipated withdrawal during the 2019 ice-covered season, and the percentage of withdrawal to the under-ice volume.

Source	**Estimated total volume (m^3)**	**Estimated below-ice volume** (m^3)**	**Anticipated withdrawal (m^3)**	**Percent of total below-ice volume (%)**
Baton Lake	17,000,000 (Beak 1989)	14,450,000	2,514.24	<0.02%
Steeves Lake	8,710,000 (Beak 1989)	6,320,000	1,200	<0.02%
Indin Lake	5,719,749,781 (Falk 1979)	5,472,854,107	1,955.52	<0.001%
Spider Lake	80,691,620 *	56,484,134	2,514.24	<0.005%

* Using a conservative estimated average lake depth of 5 metres. Water depths surrounding Treasure Island in Spider Lake ranged from 0.9 to 3.9 metres, but all were collected within 150 metres of shore and are not representative of the lake.

** Using a maximum expected ice thickness of 1.5 metres (DFO 2010).

Water Licences W2018L2-0002 and W2018L2-0002 (Part D Item 3) stipulate that total water withdrawal in one ice-covered season from a single waterbody is not to exceed 10% of the available water under-ice water volume. The scenarios presented here indicate that actual use will be less than 0.1% in all cases.

Field Confirmation

Where no historic bathymetric information is available, or if lake depth is 3.0 metres or less at the withdrawal location, a minimum of three depth measurements within 500 metres of the proposed withdrawal sites will confirm

that lakes have sufficient depth for water withdrawal. The results will be communicated to the Inspector, and withdrawal will not proceed without the Inspector's verification.

Other Water Uses

Nighthawk is not aware of other users of water from the source lakes. The WLWB Current Authorizations webviewer did not indicate other active water licences on these lakes, as of 18 February 2019. The nearest active water licence was W2014L8-0003, issued to INAC Contaminants and Remediation Directorate for the former Colomac Mine.

Other Conditions

Nighthawk assumes both Indin Lake and Spider Lake are fish-bearing. As such, Nighthawk confirms that prior to locating a Water intake in a fish-bearing Watercourse, Nighthawk shall obtain written authorization for the location from an Inspector (W2018L2-0002 and W2018L2-0003 Part D Item 4).

Nighthawk also confirms that water intake(s) will use a fish screen designed to prevent impingement and/or entrainment of fish, considering guidelines provided by DFO (1995) (W2018L2-0002 and W2018L2-0003 Part D Item 5).

References

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