SABINA GOLD AND SILVER CORP.

BACK RIVER PROJECT

2BE-GOO1520

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

January 2019

EXECUTIVE SUMMARY

This report to the Nunavut Water Board (NWB) has been prepared to summarize the project activities and monitoring undertaken by Sabina Gold and Silver during the 2018 program, in accordance with Part B, Item 2 of License 2BE-GOO1520. This license was issued on February 18th, 2015 and will expire on February 19th, 2020.

The water license for Goose Lake includes a sampling program for the recording of the water volume extracted for any purpose and monitoring water quality within specific project areas (water from within the lined fuel containment area and pre and post drilling on ice water sampling requirements).

Key activities associated with the Goose Lake Project in 2018 are summarized as follows:

- 43 holes were drilled for exploration purposes for a total of 23841.15 meters
- 26 holes were drilled for geotechnical purposes for a total of 211.3 m at various Earthworks project locations
- Mapping and sampling done in sections of Goose, Boulder, Malley, Wishbone, Boot and George Properties
- Shipment of hazardous materials from site to approved disposal facilities

During 2018, fresh water was utilized for both potable and drilling activities. Potable water for the Goose Lake camp was obtained from Goose Lake using a dedicated pump and transferred to water storage tanks at camp. Water for exploration drilling was obtained from Goose Lake, Llama Lake, Rascal Lake, Vega Lake, and Pigeon Lake. All water utilized was metered as per water license requirements. Calcium chloride was added to water to lower the freezing point and to enable drilling under permafrost conditions.

Waste management included the handling of pacto waste, domestic waste in an incinerator, hazardous waste and drill waste.

In 2018, fuel supply was provided by aircraft on both the ice and all-weather airstrip at Goose Lake.

During 2018, Sabina hosted visits as well as formal site compliance inspections from regulatory authorities including the Kitikmeot Inuit Association (KIA), and Crown Indigenous and Northern Affairs Canada (CIRNAC) Water Resources Inspector and District Geologist. These inspections provided constructive feedback and Sabina has taken corrective action where required.

Materials removed from sites included garbage, metal and timbers as well as anchors and casing cut and capped. Sabina continues to exercise drilling procedures where sites are required to be cleaned up prior to moving on to the next drill site, and internal inspections are conducted to ensure that clean up procedures are occurring. Ongoing reclamation programs will be documented as conducted in previous programs.

Community consultation was undertaken in 2018 and discussions for the current and proposed activities were held.

SABINA GOLD AND SILVER CORP.

BACK RIVER PROJECT – GOOSE LAKE

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

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SECTION 1.0 INTRODUCTION

1.1 General Background

This report to the Nunavut Water Board (NWB) has been prepared to summarize activities and monitoring undertaken at the Sabina Gold and Silver Corp. Back River Project – Goose Lake in accordance with Part B, Item 2 of 2BE-GOO1520. This license was issued on February 19th, 2015 and will expire on February 18th, 2020.

Goose Lake's water license includes a sampling program that involves monitoring water extracted for any purpose, testing water quality parameters for pre/post on ice drilling activities and testing of water quality parameters of effluent discharged from trenches or fuel farms. This information is summarized on the completed NWB Annual Report Form included in Appendix A, and described in more detail in the following sections.

Figure 1.1 illustrates the locations of the key activities areas associated with the Back River Project which include the Goose Lake, Boulder and Boot Properties.

Key activities associated with the Back River Project in 2018 are summarized as follows:

- 43 holes were drilled for exploration purposes for a total of 23841.15 meters
- 26 holes were drilled for geotechnical purposes for a total of 211.3 m at various Earthworks project locations
- Mapping and sampling done in sections of Goose, Boulder, Malley, Wishbone, Boot and George Properties
- Shipment of hazardous materials from site to approved disposal facilities

1.2 BRIEF OVERVIEW OF PROJECT ACTIVITIES IN 2018

The camp at Goose can accommodate a maximum of 158 people; however, the average daily occupancy throughout the 2018 season was 65 people with a peak of 84 people on the July opening. The 2018 field season consisted of two camp opening events: February 17th to May 3th, and July 21st to October 22nd, for a total of 199 operating days.

During the 2018 season, aircraft arriving in and out of the Goose Lake property utilized both the ice and all-weather airstrip during the February 17th to May 3th opening as well as solely the all-weather gravel airstrip during the June 21st to October 22nd.

Opening crew personnel arrived to Goose Lake Camp site on February 17th to open the camp and begin preparing the ice strip, so it could receive larger freighter aircraft. By February 27th all work crews had arrived at Goose with drilling activities initiated. Once the ice airstrip was developed enough to receive freighter aircraft, 737 type aircraft were used to deliver 12 loads of bulk fuel to Goose site. For this February to April opening, Goose Camp remained open until May 3th. The all-weather airstrip was used for air transportation during the June to October opening.

For all the 2018 openings, personnel, equipment, and supplies were mobilized to the property by fixed wing aircraft including Twin Otter (on skis for the opening crew and floats for the purpose of flying to Marine Laydown Area), Dornier 228, Dash-8, Dash-7 and ART plane. Helicopter support included one BH 407 type during the February and June openings, these aircrafts were stationed at Goose Lake and mobilized field crews when required throughout the openings. The final aircraft of the season and closure of the camp departed with the crews from Goose Lake on October 22nd.

During the two camp openings in 2018, 43 diamond drill holes were completed for exploration purposes, totaling 23841.15 meters. The location of each drill hole is illustrated on Figure 1.2.

Detailed geological mapping and sampling was completed in sections of the Goose, Boulder, Malley, Wishbone, Boot and George claims. Samples were collected and submitted for assay and trace element analysis. Detailed mapping was conducted in these areas to further our knowledge of their gold bearing potential.

The Goose Lake Quarry east of camp was operational during the 2018 season, information pertaining to this activity can be found in the 2BC-BRP1819 annual report.

SECTION 2.0 WATER USE AND WASTE DISPOSAL ACTIVITIES (PART B, ITEM 2 (A))

2.1 Water Use

In 2018, fresh water was utilized to serve two purposes: potable water supply for the Goose camp, and water supply for exploration drilling operations.

2.1.1 Methods of Obtaining Freshwater for Potable Use and Quantities of Water Used

Potable water was extracted from Goose Lake via an electrical submersible pump with a screened intake. This screened intake meets Department of Fisheries and Oceans Freshwater Intake End of Pipe Fish Screen Guidelines requirements. Water was pumped directly from Goose Lake via a pipe into holding tanks within camp. Prior to consumption, potable water is treated with filtration, chlorination and UV disinfection.

Table 2.1 summarizes daily potable water used in 2018.

2.1.2 Methods of Obtaining Freshwater for Drilling Purposes

Water for exploration drilling purposes was extracted from Goose Lake, Llama Lake and sources proximal to drilling targets during 2018.

Screened intakes were used in all instances to meet Department of Fisheries and Oceans Freshwater Intake End-of-pipe Fish Screen Guidelines to prevent entrapment of fish.

Prior to use by drills, calcium chloride was added to the water to lower its freezing temperature to allow for drilling in permafrost. A closed circuit system (poly drill) was used at each drill where return water was captured and re-used within the drilling operations. Concentrations of calcium chloride were monitored by drill staff and where required, additional calcium chloride was added to the system. This enhanced system reduces over all water and calcium chloride consumption.

Table 2.2 summarizes daily water consumption for exploration drilling purposes.

2.1.3 Methods of Obtaining Water for Dust Suppression Purposes

Water for dust suppression purposes was extracted from Goose Lake during 2018.

Screened intakes were used in all instances to meet Department of Fisheries and Oceans Freshwater Intake End-of-pipe Fish Screen Guidelines to prevent entrapment of fish.

2.2 Grey Water, Latrine and Waste Management

2.2.1 Grey water and Latrine Wastes

Grey water generated at the Goose Lake camp consists of waste streams collected from the kitchen and camp washing facilities (showers and laundry). Grease traps are installed within the kitchen which removes solid particles prior to discharge.

Grey water is discharged at two locations at the Goose Lake camp located at a site away from surface water.

At the Goose Lake camp, latrine toilets (pacto toilets) are used from which human waste is collected and disposed of in camp incinerators.

Table 2.3 contains coordinates for the grey water discharge land latrine waste locations and Figure 2.1 illustrates those locations.

2.2.2 Non-hazardous and Hazardous Waste Management

Non-hazardous waste streams consist of kitchen refuse, paper, recyclable food containers, cardboard and inert wood.

Kitchen refuse and paper are disposed of in two-stage commercial incinerators daily.

Plastic and metal food containers which were deemed appropriate for recycling are shipped off of site to an approved disposal facility in Yellowknife.

Open burning was conducted at the Goose Lake property in 2018 under Part D, Item 6 of 2BE-GOO1520.

Sabina Gold and Silver Corp. continued to expend great effort in consolidating hazardous wastes from previous years. A lined storage area was previously constructed where materials can be sorted and packaged to be shipped to Yellowknife. Once received in Yellowknife, KBL Environmental was retained to manage and properly dispose of hazardous wastes generated at the Goose Lake Camp.

Hazardous wastes generated at the Goose Lake site included waste hydrocarbon liquids, used batteries and contaminated soil. Empty fuel drums are either stored on site for further use or shipped back to the supplier for recycling purposes.

Remaining hazardous materials are stored within a lined containment area for future shipment from site.

Appendix B summarizes types and volumes of hazardous materials shipped off of site.

Figure 2.1 show the following as it relates to solid and hazardous wastes:

- Location of lined waste storage area
- Location of camp incinerator
- Location of open burn pit

Table 2.3 provides coordinates for solid and hazardous wastes locations.

2.2.3 Drill Waste

For drilling activities, drill waste was deposited in an excavated sump at the Goose camp and appropriate natural depressions located at a distance of at least thirty (31) metres from the ordinary high water mark of any adjacent water body. Coordinates of all drill waste disposal sites are found in Table 2.4.

The 2018 drilling program utilized a poly drill system whereby brine was recirculated and cuttings were separated and collected in mega bags. Mega bags containing cuttings were kept in containment trays to ensure overflow or remaining brine did not contaminate the tundra. Once full, mega bags were transported to the designated disposal site by an overland vehicle or helicopter.

SECTION 3.0 UNAUTHORIZED DISCHARGES (PART B, ITEM 2 (B))

In 2018, spill contingency training was delivered to site employees through classroom and tool box meetings.

No hydrocarbon spills were reported to the NWT/NU spills line during the 2018 season.

SECTION 4.0 UPDATES TO PLANS (PART B, ITEM 2(C))

In accordance with Part B, Item 2 (c) of the water license, an annual review of the management plans developed under the water license has been undertaken. A revised Comprehensive Spill Contingency Plan was provided to the NWB in June 2018. A revised Abandonment and Restoration Plan is appended to this 2019 Annual Report.

SECTION 5.0 PROGRESSIVE RECLAMATION WORK (PART B, ITEM 2(D))

Materials removed from sites included garbage, metal and timbers as well as anchors and casing cut and capped. Sabina continues to exercise drilling procedures where sites are required to be cleaned up prior to moving on to the next drill site, and internal inspections are conducted to ensure that clean up procedures are occurring. Ongoing reclamation programs will be documented as conducted in previous programs.

SECTION 6.0 ARTESIAN FLOW OCCURRENCES (PART B, ITEM 2(E))

No artesian flow occurrences were reported during 2018.

SECTION 7.0 WATER QUALITY OF WATER LICENSE MONITORING PROGRAM (PART B, ITEM 2(F); PART D, ITEM 12; PART J, ITEM 5 AND 6.

In 2018, monitoring stations for GOO-1 (raw water supply intake at Goose Lake) and GOO-2 (final discharge point from the bulk fuel storage facility) were active. Quantity data for GOO-1 is found in Table 2.1 and discharge volumes for GOO-2 in Table 7.1.

Treated effluent from the Goose Lake bulk fuel storage facility (GOO-2) first met water license discharge requirements on July 13th and as such was directed to the approved discharge location near the grey water line. Water quality results were forwarded to the CIRNAC Water License Inspector prior to discharge. Water quality results for GOO-2 are found in Table 7.2.

In 2018, surveys were conducted of the quarry, airstrip and connecting road to determine whether any flow existed and subsequent sampling was required as per Part J, Item 8. No flow was observed.

SECTION 8.0 OTHER INFORMATION REQUESTED (PART B, ITEM 2 (G))

In 2018, no details on water use or waste disposal was requested by the Board.

SECTION 9.0 INSPECTION AND COMPLIANCE REPORT CONCERNS

Inspections that occurred during the 2018 program includes:

- July 31st to Aug 2nd, CIRNAC Water Resources inspector completed an inspection of the Back River Project under Licence No. 2BE-GOO1520, 2BE-GEO1520, 2BC-BRP1819

- Aug 14 – Aug 16, NIRB Project Officer completed an inspection of the Back River Project under NIRB Project Certificate No. 007

- Oct 14 – Oct 15, CIRNAC Water Resources inspector completed an inspection of the Back River Project under Licence No. 2BE-GOO1520, 2BE-GEO1520, 2BC-BRP1819

Tables

TABLE 1.1

SABINA GOLD & SILVER CORP.
BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

WATER SOURCE LOCATIONS

Description	UTM Coordinates (NAD83)		Latitude	Longitude
	Easting (m)	Northing (m)		
Goose Lake				
Goose Camp Intake	434,129	7,269,996	65° 32' 43.7"N	106° 25' 34.0"W
Goose Neck	431,725	7,269,877	65° 32' 38.1"N	106° 28' 41.0"W
Goose Beak	431,391	7,269,957	65° 32' 40.4"N	106° 29' 07.1"W
Llama Lake	428,790	7,272,028	65° 33' 45.2"N	106° 32' 33.7"W
Umwelt Lake	428,921	7,270,948	65° 33' 10.5"N	106° 32' 21.5"W
Rascal Lake	434,038	7,267,812	65° 31' 33.1"N	106° 25' 37.1"W
Vega Lake	413,935	7,279,106	65° 37' 20.8"N	106° 52' 8.0"W
Vega Lake	413,691	7,279,432	65° 37' 31.1"N	106° 52' 27.9"W
Pigeon Lake	413,753	7,280,329	65° 38' 0.1"N	106° 52' 25.1"W

TABLE 2.1

SABINA GOLD & SILVER CORP.

BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

DAILY QUANTITIES OF WATER FOR CAMP

Day	February	March	April	May	June	July	August	September	October
	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)	GOO-1 (m^3)
1	N/A	4.2	6.3	4.0	N/A	5.6	8.3	18.3	8.93
2	N/A	6.3	6.3	4.0	N/A	5.6	10.1	8.4	16.15
3	N/A	6.3	6.3	N/A	N/A	6.7	4.8	11.6	8.03
4	N/A	6.3	6.4	N/A	N/A	6.7	4.1	4.7	9.04
5	N/A	6.81	6.39	N/A	N/A	6.67	6.90	7.14	7.04
6	N/A	6.95	6.26	N/A	N/A	6.67	5.29	11.59	7.61
7	N/A	6.39	6.26	N/A	N/A	6.67	6.92	8.65	6.43
8	N/A	6.81	6.26	N/A	N/A	6.67	8.33	7.30	8.92
9	N/A	6.95	6.26	N/A	N/A	6.67	9.37	9.89	6.50
10	N/A	5.42	5.14	N/A	N/A	7.23	10.06	10.25	9.52
11	N/A	5.42	5.14	N/A	N/A	7.23	7.34	9.75	5.00
12	N/A	5.56	5.14	N/A	N/A	17.23	10.57	10.27	6.58
13	N/A	5.56	5.14	N/A	N/A	7.09	7.85	8.09	8.76
14	N/A	6.67	5.14	N/A	N/A	17.78	8.05	8.03	4.9
15	N/A	6.39	5.14	N/A	N/A	8.55	10.74	10.55	6.0
16	N/A	6.39	5.14	N/A	N/A	18.29	9.28	10.40	6.2
17	N/A	6.12	5.84	N/A	N/A	7.00	9.73	9.21	7.3
18	0.97	6.12	5.84	N/A	N/A	7.00	8.63	10.61	6.9
19	0.97	6.12	5.84	N/A	N/A	7.24	11.60	7.02	N/A
20	1.53	6.53	5.84	N/A	N/A	22.12	10.82	9.59	N/A
21	2.22	6.53	5.56	N/A	N/A	3.30	10.68	6.41	N/A
22	2.50	6.53	5.56	N/A	N/A	8.60	12.84	11.19	N/A
23	2.50	6.39	5.56	N/A	1.0	8.20	10.18	6.17	N/A
24	2.78	6.39	5.00	N/A	1.0	8.30	10.11	9.57	N/A
25	2.8	6.5	4.9	N/A	3.9	11.24	8.60	8.19	N/A
26	2.8	6.5	4.9	N/A	3.9	7.13	10.09	8.46	N/A
27	2.8	6.4	4.6	N/A	3.9	18.57	74.45	8.75	N/A
28	4.2	6.4	4.4	N/A	3.9	9.06	10.38	8.36	N/A
29	N/A	6.3	4.0	N/A	5.6	13.22	9.54	11.10	N/A
30	N/A	6.3	4.0	N/A	5.6	6.56	10.57	5.86	N/A
31	N/A	6.3	N/A	N/A	N/A	4.72	11.84	N/A	N/A
Total	**26.0**	**193.6**	**164.4**	**8.1**	**28.6**	**283.5**	**348.0**	**275.4**	**140.0**

TABLE 2.2

SABINA GOLD & SILVER CORP.

BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

DAILY QUANTITIES OF WATER FOR DRILLING PURPOSES

Day	March	April	May	June	July	August	September	October
	(m^3)	(m^3)	(m^3)	(m^3)	(m^3)	(m^3)	(m^3)	(m^3)
1	N/A	225	33	N/A	16	44	87	78
2	N/A	152	30	N/A	28	156	29	74
3	N/A	121	35	N/A	64	84	69	0
4	N/A	105	35	N/A	88	79	42	43
5	N/A	105	N/A	N/A	49	45	43	45
6	N/A	171	N/A	N/A	96	76	52	53
7	99	167	N/A	N/A	117	68	74	60
8	165	171	N/A	N/A	66	110	73	59
9	139	130	N/A	N/A	137	124	37	61
10	136	131	N/A	N/A	78	19	70	61
11	132	157	N/A	N/A	18	46	37	62
12	195	120	N/A	N/A	70	167	94	62
13	194	217	N/A	N/A	139	124	62	75
14	193	159	N/A	N/A	87	98	61	18
15	196	151	N/A	N/A	98	98	33	33
16	166.3	122.7	N/A	N/A	99	63	68	11
17	104	223	N/A	N/A	109	76	63	N/A
18	132	161	N/A	N/A	84	102	79	N/A
19	104	144	N/A	N/A	101	85	50	N/A
20	45	133	N/A	N/A	67	107	35	N/A
21	86	127	N/A	N/A	88	88	71	N/A
22	135	127	N/A	N/A	80	71	73	N/A
23	204	125	N/A	N/A	30	28	81	N/A
24	203	158	N/A	N/A	61	52	89	N/A
25	277	93	N/A	N/A	46	114	72	N/A
26	117	14	N/A	N/A	58	69	61	N/A
27	185	N/A	N/A	N/A	59	36	50	N/A
28	177	N/A	N/A	N/A	61	92	99	N/A
29	178	N/A	N/A	12	100	72	40	N/A
30	195	N/A	N/A	8	118	69	84	N/A
31	195	N/A	N/A	N/A	38	75	N/A	N/A
Total	**3950**	**3710**	**132**	**20**	**2352**	**2538**	**1878**	**795**

Notes:

TABLE 2.3

SABINA GOLD & SILVER CORP.
BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

LOCATION OF STORAGE AREAS FOR WASTES AND WASTE STREAMS

Description	UTM Coordinates (NAD83)		Latitude	Longitude
	Easting (m)	Northing (m)		
Goose Lake				
Grey Water Line	434,069	7,269,849	65°32'38.94"	106°25'38.35"
Grey Water Line #2	433,943	7, 269,908	65°32'40.8"	106°25'48.3"
Incinerator	434,155	7,269,817	65°32'38.0"	106°25'31.6"
Hazardous Waste Backhaul Storage Area	433,840	7,270,021	65°32'44.3"	106°25'56.5"
Cuttings Trench (Reclaimed)	434,122	7,269,616	65° 32' 31.5"	106° 25' 33.8"
Cuttings Trench #2 (Reclaimed)	434,140	7,269,738	65° 32' 35.4"	106° 25' 32.6"
Cuttings Trench #3	434,120	7, 269,738	65° 32 35.3"	106° 25' 32.6"
Open Burn Pit	434,105	7,269,787	65°32'37.0"	106°25'35.4"
Hazardous Materials Storage Area	433,815	7,270,008	65°32'43.9"	106°25'58.4"
Goose Lake Fuel Farm	433,959	7,269,975	65°32'42.9"	106°25'47.2"
Major Drilling Oils/ Additives Location #1	434,079	7,269,648	65°32'32.5"	106°25'37.2"
Major Drilling Oils/ Additives Location #2	434,061	7,269,636	65°32'32.1"	106°25'38.6"
18BRP046	413,942	7,279,003	65° 37' 17.5"	106° 52' 7.3"
18BRP047	413631	7,279,404	65° 37' 30.1"	106° 52' 32.5"

TABLE 2.4

SABINA GOLD & SILVER CORP.
BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

DRILLING WASTE (CUTTINGS) DEPOSIT LOCATIONS

Description	UTM Coordinates (NAD83)		Latitude	Longitude
	Easting (m)	Northing (m)		
Goose Lake				
18BRP046	413,942	7,279,003	65° 37' 17.5"N	106° 52' 7.3"W
18BRP047	413,631	7,279,404	65° 37' 30.1"N	106° 52' 32.5"W
Goose Lake Cuttings Trench #3	434,120	7, 269,738	65° 32 35.3"N	106° 25' 32.6"W

TABLE 7.1

SABINA GOLD AND SILVER CORP.
BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

GOOSE LAKE FUEL FARM TREATED EFFLUENT (GOO-2) DISCHARGE VOLUMES

Date	Monitoring Station	Discharge Volumes (m3)
26-Jul	GOO-2	44

TABLE 7.2

SABINA GOLD & SILVER CORP.
BACK RIVER PROJECT

2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

WATER QUALITY RESULTS FOR WATER LICENCE MONITORING LOCATION GOO-2

Sample Location	Date Sampled	pH (pH units)	Phenols (mg/L)	Oil and Grease (mg/L)	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Comments
GOO-2	26-Jun-18	6.66	<0.0010	<2.0	<0.00050	<0.00050	<0.00050	

TABLE 7.3

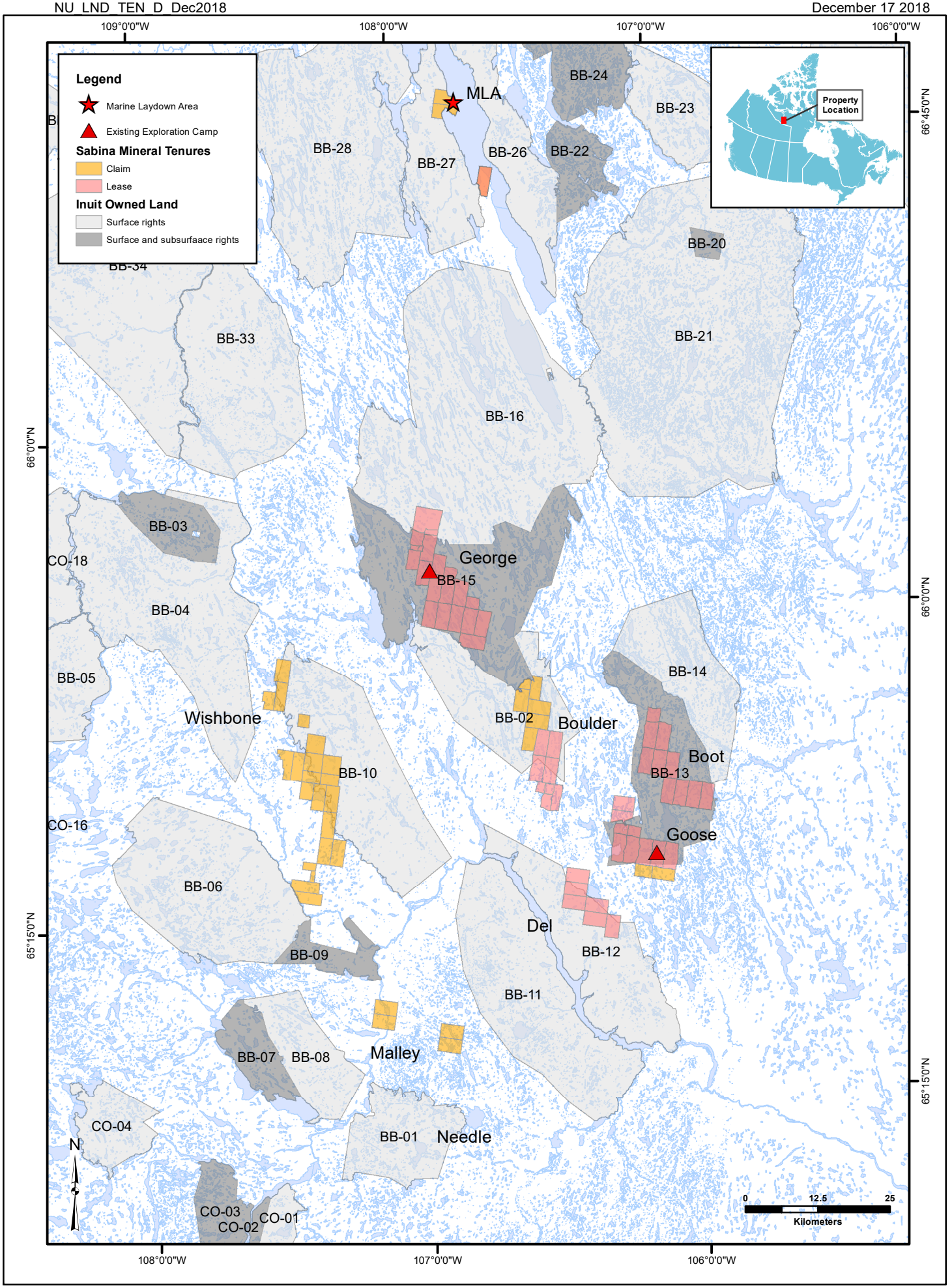
SABINA GOLD & SILVER CORP.
BACK RIVER PROJECT

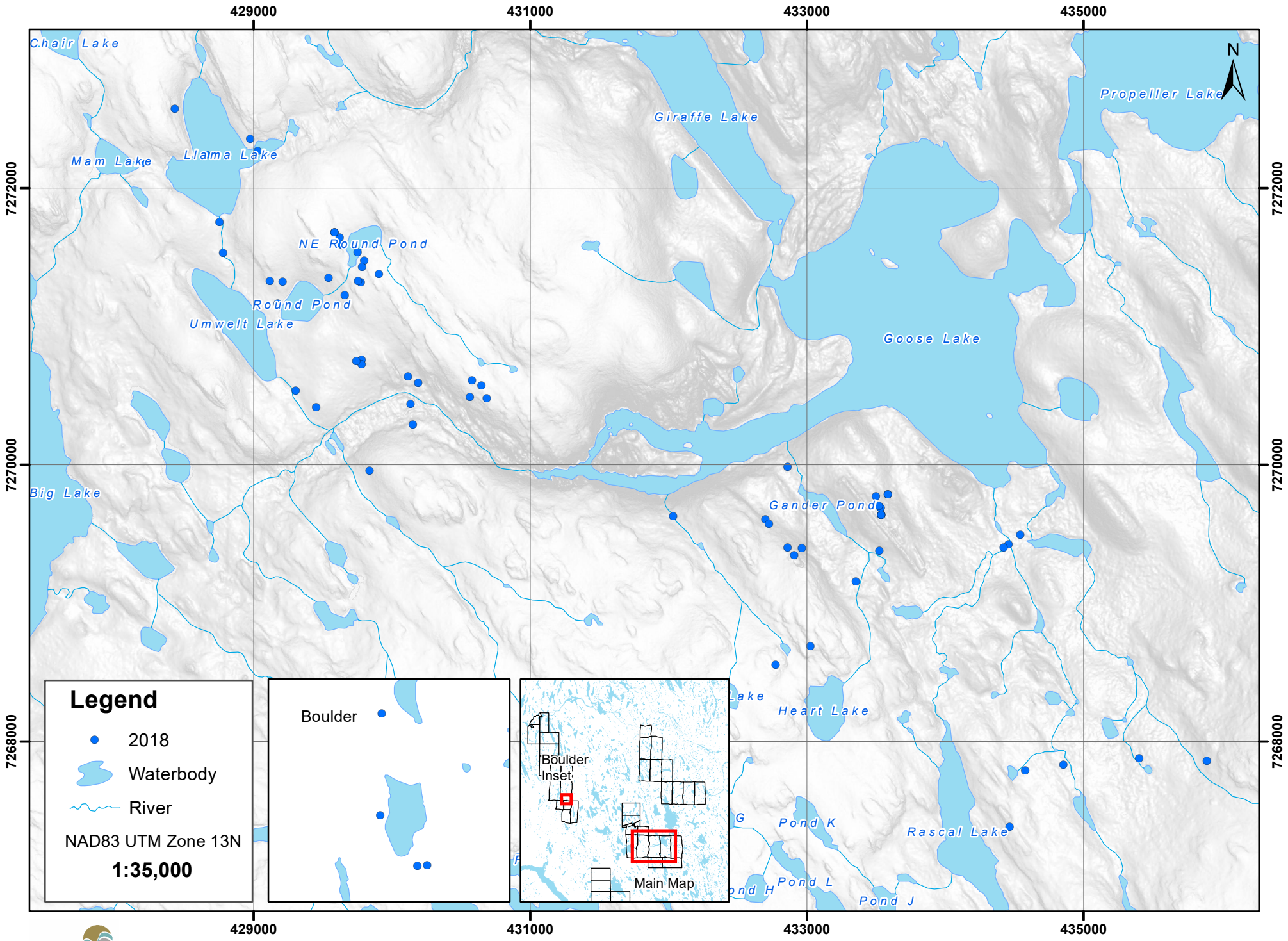
2018 ANNUAL REPORT TO THE NUNAVUT WATER BOARD

WATER QUALITY RESULTS FOR ON ICE DRILLING

Parameter	Units	Llama Lake - Pre On Ice Drilling April 6, 2018	Llama Lake - Post On Ice Drilling April 13, 2018
pH	pH	7.31	6.92
Conductivity (EC)	uS/cm	89.8	123
Mercury (Hg)-Total	mg/L	<0.0000050	<0.0000050
Aluminum (Al)-Total	mg/L	0.0095	<0.0030
Antimony (Sb)-Total	mg/L	<0.00010	<0.00010
Arsenic (As)-Total	mg/L	0.00042	0.00055
Barium (Ba)-Total	mg/L	0.0187	0.0178
Beryllium (Be)-Total	mg/L	<0.00010	<0.00010
Bismuth (Bi)-Total	mg/L	<0.000050	<0.000050
Boron (B)-Total	mg/L	<0.010	<0.010
Cadmium (Cd)-Total	mg/L	<0.0000050	<0.0000050
Calcium (Ca)-Total	mg/L	11.4	9.67
Cesium (Cs)-Total	mg/L	0.000016	0.000015
Chromium (Cr)-Total	mg/L	0.00022	<0.00010
Cobalt (Co)-Total	mg/L	<0.00010	<0.00010
Copper (Cu)-Total	mg/L	0.00161	0.00786
Iron (Fe)-Total	mg/L	0.060	0.040
Lead (Pb)-Total	mg/L	0.000475	0.000051
Lithium (Li)-Total	mg/L	0.0027	0.0025
Magnesium (Mg)-Total	mg/L	5.16	5.33
Manganese (Mn)-Total	mg/L	0.00177	0.00152
Molybdenum (Mo)-Total	mg/L	<0.000050	<0.000050
Nickel (Ni)-Total	mg/L	0.00294	0.00264
Phosphorus (P)-Total	mg/L	<0.050	<0.050
Potassium (K)-Total	mg/L	1.21	1.19
Rubidium (Rb)-Total	mg/L	0.00256	0.00269
Selenium (Se)-Total	mg/L	<0.000050	<0.000050
Silicon (Si)-Total	mg/L	0.74	0.76
Silver (Ag)-Total	mg/L	<0.000010	<0.000010
Sodium (Na)-Total	mg/L	1.87	1.68
Strontium (Sr)-Total	mg/L	0.0733	0.0684
Sulfur (S)-Total	mg/L	5.29	5.31
Tellurium (Te)-Total	mg/L	<0.00020	<0.00020
Thallium (Tl)-Total	mg/L	<0.000010	<0.000010
Thorium (Th)-Total	mg/L	<0.00010	<0.00010
Tin (Sn)-Total	mg/L	<0.00010	<0.00010
Titanium (Ti)-Total	mg/L	<0.00030	<0.00030
Tungsten (W)-Total	mg/L	<0.00010	<0.00010
Uranium (U)-Total	mg/L	<0.000010	<0.000010
Vanadium (V)-Total	mg/L	<0.00050	<0.00050
Zinc (Zn)-Total	mg/L	0.0111	<0.0030
Zirconium (Zr)-Total	mg/L	<0.000060	<0.000060
Total Suspended Solids	mg/L	<3.0	<3.0

Figures


109°0'0"W
108°0'0"W
107°0'0"W
106°0'0"W
66°45'0"N
66°0'0"N
65°15'0"N
Legend
Marine Laydown Area
Existing Exploration Camp
Sabina Mineral Tenures
Claim
Lease
Inuit Owned Land
Surface rights
Surface and subsurfaace rights
Property Location
MLA
BB-24
BB-23
BB-28
BB-27
BB-26
BB-22
BB-20
BB-34
BB-33
BB-21
BB-16
BB-03
CO-18
George
BB-15
BB-04
BB-05
BB-14
Wishbone
BB-02
Boulder
Boot
BB-13
BB-10
CO-16
Goose
BB-06
Del
BB-12
BB-09
BB-11
BB-07
BB-08
Malley
CO-04
BB-01
Needle
N
CO-03
CO-02
CO-01
0
12.5
25
Kilometers



Sabina
GOLD & SILVER CORP.

GSE_ENV_NA_Fig_1.3 DrillingWaterSource2018 W:\BackRiver\04_Exploration\Goose\GIS_Products\ESRI_MXD\Permitting\GSE_ENV_NA_Fig_1.3 DrillingWaterSource2018.mxd December 13 2018

Goose Lake Area - Water Source Locations

7273000

7270000

Llama Lake

Umwelt Lake

Goose Lake

Propeller Lake

Legend

Water Source Use:

- Potable
- Drilling
- Waterbody
- Rivers

N

0 0.5 1 2 Kilometers

Boulder Area - Water Source Locations

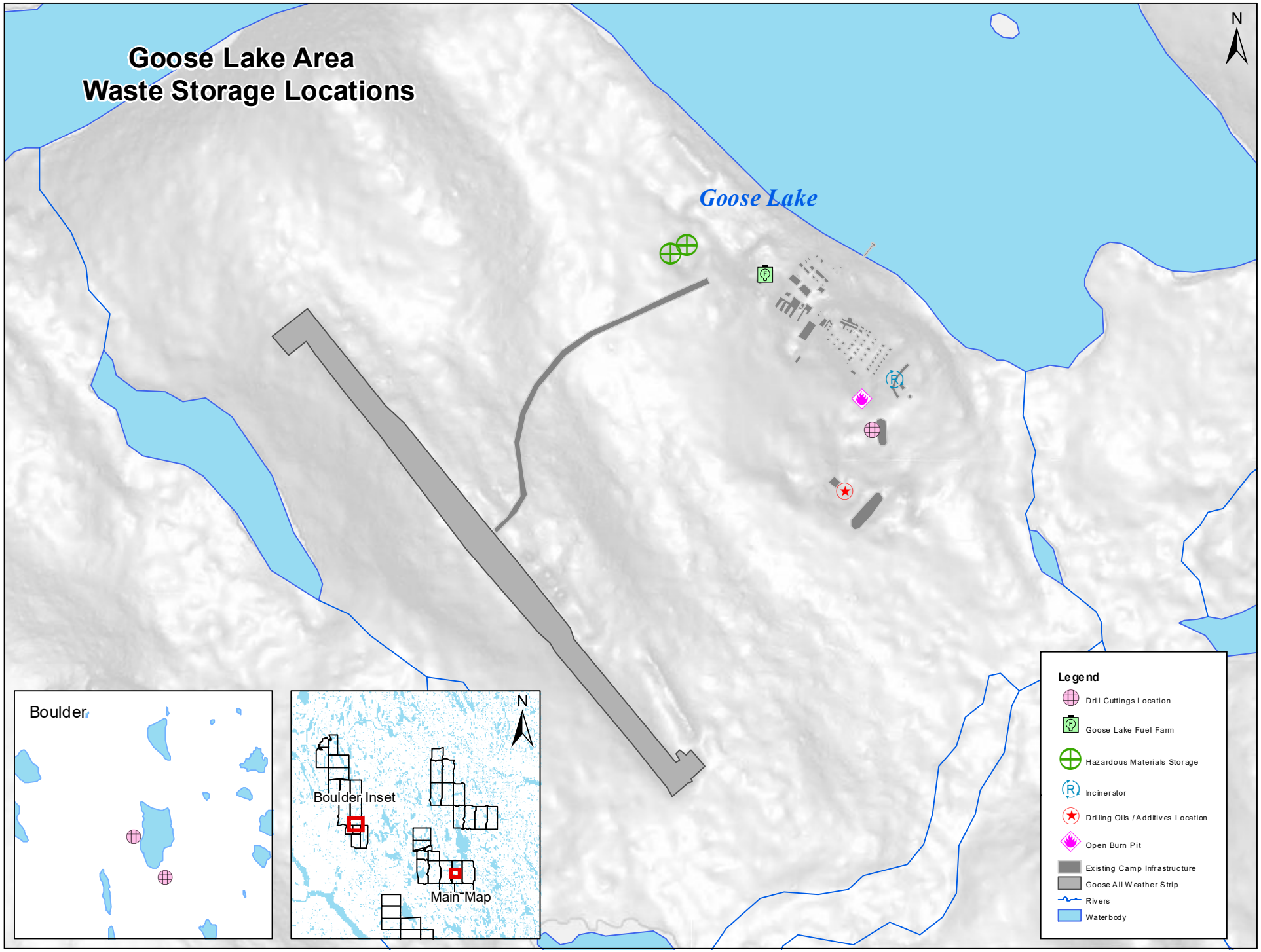
Back River Project Overview

Boulder Area

Main Map

Projection: NAD 1983 UTM Zone 13N

432000


Goose Lake Area
Waste Storage Locations
Goose Lake
N
Boulder
Boulder Inset
Main Map
Legend
Drill Cuttings Location
Goose Lake Fuel Farm
Hazardous Materials Storage
Incinerator
Drilling Oils / Additives Location
Open Burn Pit
Existing Camp Infrastructure
Goose All Weather Strip
Rivers
Waterbody

Appendix A

NWB Annual Report **Year being reported:** Select

License No: 2BE-GOO1520 **Issued Date:** February 19, 2015
Expiry Date: February 18, 2020

Project Name: GOOSE LAKE, BACK RIVER PROJECT

Licensee: SABINA GOLD AND SILVER CORP

Mailing Address:

Name of Company filing Annual Report (if different from Name of Licensee please clarify relationship between the two entities, if applicable):

SABINA GOLD AND SILVER CORP

General Background Information on the Project (*optional):

Licence Requirements: the licensee must provide the following information in accodance with

Part B Item 2

A summary report of water use and waste disposal activities, including, but not limited to: methods of obtaining water; sewage and greywater management; drill waste management; solid and hazardous waste management.

Water Source(s):	Goose lake for domestic, lakes proximal to drilling	
Water Quantity:	30	Quantity Allowable Domestic (cu.m)
		Actual Quantity Used Domestic (cu.m)
	267	Quantity Allowable Drilling (cu.m)
		Total Quantity Used Drilling (cu.m)

Waste Management and/or Disposal

- [x] Solid Waste Disposal
- [x] Sewage
- [x] Drill Waste
- [x] Greywater
- [x] Hazardous
- [ ] Other:

Additional Details:

Please see Section 2.0 of Annual Report.

A list of unauthorized discharges and a summary of follow-up actions taken.

Spill No.: (as reported to the Spill Hot-line)
Date of Spill:
Date of Notification to an Inspector:
Additional Details: (impacts to water, mitigation measures, short/long term monitoring, etc)

Please see Section 3.0 of Annual Report.

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed

Additional Details:

An updated SCP was provided to the NWB in June 2018

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed

Additional Details:

Progressive Reclamation Work Undertaken

Additional Details (i.e., work completed and future works proposed)

Please see Section 5.0 of Annual Report.

Results of the Monitoring Program including:

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where sources of water are utilized;

Details attached

Additional Details:

Please see Table 1.1 of Annual Report.

The GPS Co-ordinates (in degrees, minutes and seconds of latitude and longitude) of each location where wastes associated with the licence are deposited;

Details attached

Additional Details:

Please see Table 2.4 of Annual Report.

Results of any additional sampling and/or analysis that was requested by an Inspector

No additional sampling requested by an Inspector or the Board

Additional Details: (date of request, analysis of results, data attached, etc)

Any other details on water use or waste disposal requested by the Board by November 1 of the year being reported.

No additional sampling requested by an Inspector or the Board

Additional Details: (Attached or provided below)

Any responses or follow-up actions on inspection/compliance reports

Inspection Report received by the Licensee (Date):

Additional Details: (Dates of Report, Follow-up by the Licensee)

Please see Section 9.0 of Annual Report.

Any additional comments or information for the Board to consider

Date Submitted:	Jan-19	
Submitted/Prepared by:	Merle Keefe	
Contact Information:	**Tel:**	
	Fax:	
	email:	mkeefe@sabinagoldsilver.com

Appendix B

Sabina Waste Manifest - 2018

Bill Of Lading Number	Customer	Manifest #	Date Received	Waste Stream	UOM	Waste Class	UN #	Waste From Location	Quantity
YK0000001980	Sabina Gold and Silver Corp.	NT13280-2	3/21/2018	BATTERIES LEAD ACID	SK	8	2794	Sabina Gold and Silver Corp.	1.00
									1.00
				NON REGULATED SOLIDS-GENERAL DEBRIS	D	NRS	NRS	Sabina Gold and Silver Corp.	3.00
									3.00
				NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	3.00
									3.00
				NON REGULATED SOLIDS-WHITE GOODS	E	NRS	NRS	Sabina Gold and Silver Corp.	1.00
									1.00
YK0000002015	Sabina Gold and Silver Corp.		4/6/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	8.00
									8.00
YK0000002210	Sabina Gold and Silver Corp.		6/26/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	3.00
									3.00
				NON REGULATED SOLIDS-OIL/FUEL FILTERS	D	NRS	NRS	Sabina Gold and Silver Corp.	1.00
									1.00
YK0000002280	Matrix Avaition Solutions Inc.	NT13485-7	7/31/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold & Silver Corp	5.00
									5.00
				NON REGULATED SOLIDS-OIL/FUEL FILTERS	D	NRS	NRS	Sabina Gold & Silver Corp	1.00
									1.00
				NON REGULATED SOLIDS-OILY DEBRIS	D	NRS	NRS	Sabina Gold & Silver Corp	1.00
									1.00
				NON REGULATED SOLIDS-RAGS AND ABSORBENTS	D	NRS	NRS	Sabina Gold & Silver Corp	2.00
									2.00
				WASTE LEACHATE-OIL	D	NRL	NRL	Sabina Gold & Silver Corp	2.00
									2.00
				WATER CONTAMINATED WITH HYDROCARBONS	D	NRL	NRL	Sabina Gold & Silver Corp	2.00
									2.00
YK0000002351	Sabina Gold and Silver Corp.		8/22/2018	NON REGULATED SOLIDS-SCRAP METAL(DESK)	KG	NRS	NRS	Sabina Gold and Silver Corp.	1.00
									1.00
YK0000002373	Sabina Gold and Silver Corp.		8/30/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	38.00
									38.00
YK0000002375	Matrix Avaition Solutions Inc.		8/31/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold & Silver Corp	7.00
									7.00
YK0000002391	Sabina Gold and Silver Corp.	NT15068-9	9/10/2018	NON REGULATED SOLIDS-CALCIUM CHLORIDE	D	NRS	NRS	Sabina Gold and Silver Corp.	12.00
									12.00
				NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	9.00
									9.00
				SOIL CONTAMINATED WITH HYDROCARBONS	D	NRS	NRS	Sabina Gold and Silver Corp.	9.00
									9.00
YK0000002437	Matrix Avaition Solutions Inc.		9/26/2018	NON REGULATED SOLIDS-AMMONIUM NITRATE BAGS	M	NRS	NRS	Sabina Gold & Silver Corp	4.00
									4.00
YK0000002450	Matrix Avaition Solutions Inc.		10/4/2018	NON REGUALTED SOLID - HYDRAULIC HOSES	D	NRS	NRS	Sabina Gold & Silver Corp	1.00
									1.00
				NON REGULATED SOLIDS-OIL/FUEL FILTERS	D	NRS	NRS	Sabina Gold & Silver Corp	2.00
									2.00
YK0000002457	Sabina Gold and Silver Corp.		10/4/2018	NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	4.00
									4.00
YK0000002474	Sabina Gold and Silver Corp.	NT15125-7	10/15/2018	BATTERIES-LEAD ACID	E	8	2794	Sabina Gold and Silver Corp.	18.00
									18.00
				BATTERIES-NICAD	KG	8	2079	Sabina Gold and Silver Corp.	1.00
									1.00
YK0000002523	Sabina Gold and Silver Corp.	NT15154-7	11/1/2018	NON REGULATED SOLIDS-CALCIUM CHLORIDE	D	NRS	NRS	Sabina Gold and Silver Corp.	2.00
									2.00
				NON REGULATED SOLIDS-INCINERATOR ASH	D	NRS	NRS	Sabina Gold and Silver Corp.	10.00
									10.00
				SOIL CONTAMINATED WITH HYDROCARBONS	D	NRS	NRS	Sabina Gold and Silver Corp.	2.00
									2.00

Appendix C

Back River Project

Abandonment and Restoration Plan

Goose Camp and Exploration Project

January 2019

Table of Contents

1.0 INTRODUCTION

1.1 General

Sabina Gold & Silver Corp. (Sabina) is actively exploring the Back River property mineral rights (encompassing the primary exploration camp at Goose Lake, as well as a satellite camp at George Lake and unoccupied claim groups at Boot Lake, Boulder Pond, Wishbone, and Del Lake). Advanced exploration programs have been carried out in previous years with similar activities anticipated as Sabina continues to advance the project.

Sabina is also responsible for maintaining all permits and claims required for the project in good standing. The Back River Project is covered by the following land use licenses:

Table 1. List of licenses and permits applicable to the Back River Project

Authorization No.	Expiry (YYYY-MM-DD)	Agency	Description
KTCL-18D001	2038-04-20	KIA	Commercial Lease - Goose
KTCL-18D002	2038-04-20	KIA	Commercial Lease - MLA
KTCL-18D003	2038-04-20	KIA	Commercial Lease – Winter Road
KTAEL-18C001	2023-04-20	KIA	Advanced Exploration Lease – George
LUL-XX	5 years from Effective Date	KIA	Land Use Licence as per KIA Framework Agreement
KTL312C004	2018-12-12	KIA	Wishbone-Malley Exploration Activities
N2018F0021	2023-10-29	CIRNAC	CAT Train Beechy Lake Area
N2017F0016	2022-07-20	CIRNAC	CAT Train connecting Bathurst Inlet - Back River Project
N2012C0003	2019-02-06	CIRNAC	Wishbone-Malley Exploration Activities
N2016C0011	2021-10-26	CIRNAC	Back River Exploration Activities
N2018F0017	2023-10-11	CIRNAC	Winter Ice Road Back River Project
Lease No. 76J/12-7-2	2048-08-14	CIRNAC	Marine environment land lease – adjacent to MLA
2BE-GOO1520	2020-02-18	NWB	Goose Water Licence (Type B)
2BE-GEO1520	2020-05-29	NWB	George Water Licence (Type B)
2BE-MLL1722	2022-06-29	NWB	Wishbone-Malley Water Licence (Type B)
2BC-BRP1819	2019-04-30	NWB	Back River Project Development Works Water Licence (Type B)
18-HCAA-00185	-	DFO	Letter of Authorization – Gander Culvert
18-HCAA-00971	-	DFO	Letter of Authorization – MLA
04 009 19R-M	2019-12-31	NRI	Back River Project Scientific Research License
2012-600767-002	-	TC	Navigation Protection Act – MLA Discharge Pipeline Permission Notice
2012-600767-003	-	TC	Navigation Protection Act – MLA Intake Pipeline Permission Notice
PC No. 007	-	NIRB	Back River Project NIRB Project Certificate

Operating and managing an exploration project on tundra requires a lot of effort from all parties involved. The area is environmentally sensitive and all aspects of exploration because of our activities, products, and services will be risk assessed with management protocols developed, implemented, and communicated to our employees, interested parties, and suppliers to eliminate or minimize any negative impacts to the receiving environment.

In 2018, the Goose Lake exploration camp (Goose camp) was operational from February 17th to October 22nd; the George Lake exploration camp (George camp) was not open this year.

During the 2018 season, crew, equipment, and supplies were flown to Goose camp utilizing the 915-m all-weather airstrip, as well as the temporary ice airstrip constructed on Goose Lake. At the end of the season, the crew was demobilized back to Yellowknife. Drill equipment and supplies may remain at the project area for use during subsequent exploration seasons.

Sabina will implement this Abandonment and Restoration Plan (ARP or the Plan) when scheduled and will continue to look for ways to minimize or eliminate negative impacts to the environment as a result of its activities, products, and services at Sabina's Back River properties.

1.2 Sabina Sustainable Development Policy

Sabina Gold & Silver Corp. regards itself as a responsible explorer and mineral developer. We are committed to fostering sustainable development throughout all stages of our activities. We constantly strive to conduct our operations in a manner that balances the social, economic, cultural and environmental needs of the communities in which we operate.

To build on this commitment, Sabina will:

- Meet or strive to exceed all relevant legislated sustainable development requirements in the regions where we work.
- Ensure appropriate personnel, resources and training is made available to implement our sustainable development objectives.
- Establish clear lines of responsibility and accountability throughout the company to meet these objectives.
- Implement proven management systems and procedures to facilitate our sustainable development objectives. A Priority will be placed on developing and implementing management structures related to the environment, health and safety, emergency response and stakeholder engagement.
- Act as responsible stewards of the environment for both current and future generations. We will make use of appropriate assessment methodologies, technologies and controls to minimize environmental risks throughout all stages of mineral development.
- Work closely with local communities and project stakeholders to understand their needs, address their concerns and provide project-related benefits to create win-win relationships. Our goal is to earn and maintain a social licence to operate at all our

operations while building partnerships.
- Pursue economically feasible projects in order to generate shareholder profitability and support long-term positive socio-economic development in the regions where we work.
- Utilize a precautionary approach as it applies to potential effects from our activities. Work with employees, contractors and stakeholders to promote a culture of open and meaningful dialogue to ensure that any k own or suspected departures from established protocols are reported to management in a timely manner.
- Regularly review this policy to ensure it is consistent with Sabina's current activities and the most recent legislation.
- Continually improve our performance and contributions to sustainable development including pollution prevention, waste minimization and resource consumption.
- Implement programs at each of our operations to monitor and report compliance and proactively address potential deficiencies in our policies and procedures.

The objectives of our sustainable development policy cannot be accomplished without the active involvement and commitment of many dedicated individuals. As such, we will regularly communicate this policy and its outcomes to our employees, contractors and relevant stakeholders. Together, we can foster a culture of sustainable development at Sabina.

1.3 Legal Requirement

Under the terms of the Kitikmeot Inuit Association (KIA) Land Use Licenses and the Nunavut Water Board (NWB) Water Use Licenses, Sabina is obligated to rehabilitate the areas used to its previous standard of human utilization and natural productivity.

1.4 Site Location and Description

The Back River exploration project is located in the Kitikmeot, south of Bathurst Inlet within the Slave Structural Province. It is approximately 525 kilometres northeast of Yellowknife and 400 kilometres south of Cambridge Bay, NU. The project area is within the zone of continuous permafrost, and is represented on National Topographic System 1:250,000 scale map sheets 76F, 76G, 76J, and 76K. The primary base of operations is at Goose camp located near Goose Lake (Figures 1 and 2), supported by a satellite camp near George Lake (Figure 1) used for resupply, staging, drill support, and emergencies. Coordinates for the camps are as follows:

Goose Camp: 65°32' north 106°25' west
George Camp: 65°55' north 107°27' west

The Goose camp is located on the slope of the western bank of Goose Lake and consists of a 158-person camp constructed for support services directed towards exploration activities. The camp is approximately 50 meters (m) south of the lakeshore, and the regional topographical gradient surrounding the camp ranges from 2% to 6% towards the north. The camp is approximately 500 metres (m) in length from east to west and 100 m wide from north to south, covering an area of 50,000 m^2. A small but visible creek runs east northeast on the eastern side of the camp. The camp facilities are

located on natural tundra underlain by a of layer overlying silt-sand material.

1.5 Scope of Reporting

This Abandonment and Restoration Plan has been written to meet the requirements of the Nunavut Water Board (NWB) licenses listed in Table 1 and applies to the Goose camp and all unoccupied claim groups referenced in Section 1.1. Subject to annual review and revision, it will remain applicable throughout the duration of the NWB licenses or until a material change in the scope of the project occurs.

The current revision of the ARP has been prepared for on-going exploration activities. The Plan also takes into consideration the likelihood of premature camp closure due to:

- Sudden drop in gold prices which could make the project uneconomical;
- Drop in resource grade to a value lower than anticipated;
- Non-compliance to legislative requirements;
- Natural disasters;
- Force majeure;
- Change of ownership/operator.

In situations as such mentioned above, this plan provides the base strategy for anticipated tasks of restoring Goose camp in an event where exploration activity has ceased, either on a short term or a long term basis. The plan will be reviewed annually and updated with current information.

Section 1 of the Plan gives a brief account of the ownership of the property, the sustainable development policy, legal requirements, and a brief description of the camp. Section 2 outlines responsibilities for execution of the Plan. Section 3 outlines a brief time schedule for restoration activities after completion of each exploration program. A list of infrastructure at the Goose camp is compiled and a brief summary on the progressive restoration program is provided. Sections 4 and 5 of the Plan provide details of how each exploration aspect will be addressed, while the final section (Section 6) outlines when the next review of the Plan would be conducted.

2.0 RESPONSIBILITIES FOR THE PLAN

Senior personnel at the Back River Project (at the main camp at Goose Lake) are responsible for the implementation of this plan. However, every employee, contractor, and visitor arriving on the Back River Project site has a responsibility to ensure that they adhere to the Sabina sustainable development policy. The policy will be communicated to all employees, contractors, and visitors during their stay at Project in a formal site orientation program given by the Site Superintendent.

Contact information for key personnel is as follows, and will be updated on an as-needed basis. Currently, camp-based phone numbers are not available at this time:

- Vice President, Environment & Sustainability – Matthew Pickard

- Exploration Manager – James Maxwell
- Environmental Engineer – Merle Keefe

3.0 SCHEDULE FOR ABANDONMENT AND RESTORATION

For each exploration season, the closure of the Back River Project sites should take approximately 14-21 days to complete, allowing for variable weather conditions. As exploration activities vary from year to year and the end of the field season is difficult to predict months in advance, the restoration program will likely commence in the late summer and extend into the 4th quarter of the year. Since Goose camp is the main camp servicing outlying exploration areas, it would take the longest to shut down.

Outlying drill sites will take minimal time as their shut down requirements are much less. Other sites in the Back River Project area include the George camp and diamond drill sites. These would close down simultaneously with exploration as there is the proper support at this time (personnel, aircraft).

3.1 List of Infrastructure at Goose Camp

Table 2. Goose Camp Infrastructure and Equipment (December 2018; no change since 2013)

Category	Qty	Item
Buildings	11	Sleeping tents
	29	Sleeping tents (wood sides)
	2	Sleeping cabin (emergency shack)
	1	Sleeping complex/medic
	2	TV tents (wood sides)
	2	Emergency response tents
	1	Core processing facility (coreshack, saw room, sample dispatch)
	1	Kitchen/dining hall/cold storage
	1	Dry (men's/women's/water storage & treatment)
	1	Dry (drillers)
	1	Office complex
	2	Generator shacks (main and auxiliary power)
	1	Drillers' office (old)
	1	Shop building (Helicopter contractor)
	1	Tool crib & storage
	1	Shop building (Major/old)
	1	Shop building (Major/new)
	1	Oil storage shed
	2	Quonsets
	1	Warehouse
	1	Exercise building
	1	Sauna
	1	Environment Building
	1	Incinerator Building
	1	Potable Water Pump Shack
Other Infrastructure	1	Bermed storage area for fuel tanks
	6	75,000L double-walled fuel tanks

	7	75,000L seacan-double walled fuel tanks
	2	Lined laydown areas for drummed fuel supplies, furnace waste oil, and salt.
	1	all-weather airstrip and survival tent for shelter
	1	road connecting airstrip to camp
	4	Helipads
	1	camp infrastructure (corridors)
	1	Jetty + floating dock
Equipment	1	Loader - Cat 966H
	1	Dozer - Cat D6N
	1	Powerscreen - Mobile Crusher
	1	Powerscreen - Mobile Screener
	1	Powerscreen - Crusher Jaw
	1	Fuel Truck
	2	289C Caterpillar skidsteers
	1	Loader - Cat IT 28
	1	Telehandler - JCB
	2	Low bed trailers
	1	Challenger - Cat 755B
	1	Tractor / Trailer
	3	Ford Pick-ups
	2	Dozer - Cat D7
	1	Excavator - Cat 320E
	2	Articulated Trucks - Cat 730C
	1	Grader - Cat 140M
	1	Packer - Cat CS563
	1	Water Truck
	2	Camp Genset - 125kw
	2	Primary generator (500kW)
	1	Auxiliary generator (400kW)
	31	Snowmobiles (14 Sabina, 17 Major)
	2	ATVs
	1	Kubota
	8	Aluminum boats + motors
	1	Waste incinerator

The final inventory of fuel and drilling supplies remaining in the camp at closure (as of December, 2018) includes:

- Diesel – 213,451 litres of bulk diesel contained in the Envirotanks;
- Jet A/B – 108 drums in secondary containment;
- Gasoline – 4 drums in secondary containment;
- Av Gas – 4 drums in secondary containment;
- Propane – 9 x 250-lb. cylinders;
- CaCl drilling salt – 669 x 50-lb. bags; and
- Core boxes – 170 NQ boxes, and 102 HQ boxes.

3.2 Progressive Reclamation

Sabina has embarked on a program of progressive reclamation over the entire Back River project area. Progressive restoration will be ongoing throughout the exploration programs thereby reducing the need for a full-scale restoration program at the closure of each exploration phase. Ongoing significant restoration activities are described below.

3.2.1 Contaminated Area Reclamation

3.2.1.1 Recycle of Water Contaminated Fuel

Contaminated fuels are recycled primarily as fuel for the garbage incinerator or as fuel for the water heaters used in the drilling program. If present in sufficient quantities, contaminated fuel may be recycled for camp heating purposes. For water with minor amounts of hydrocarbons, an oil-water separator may be used and/or activated charcoal filters. As a last resort, it may be transported off the property for disposal at an appropriate facility.

3.2.1.2 Contaminated Top Soil

Spills are handled as per the Comprehensive Spill Contingency Plan. Enviromat is immediately applied to absorb spills of hydrocarbons, minimizing the amount of soil required to be removed. Remaining contaminated soils are removed and stored in barrels for transportation to permitted disposal sites.

3.2.2 Non-combustible Solid Waste

Solid waste including metal scraps, drill rods, household items, etc. are stored in an appropriate marshalling area for backhaul. The material is arranged in such a way that it can be easily removed from the property, and disposal will be appropriate to the material being removed, either to an approved disposal facility, metal recycler, or an approved designated landfill.

Ash from the incinerator is stored in empty 205-L drums for backhaul and disposal.

4.0 WINTER RESTORATION PLAN

The winter restoration plan is intended to cover short-term (seasonal) closure of the Back River Project. The tasks involved are important to the success of future exploration programs but require significantly less effort than the full restoration plan.

4.1 Buildings and Contents

All tents and building complexes will be secured for the winter. All the office equipment, household furniture, kitchen equipment, recreational equipment, and other mobile heavy equipment will be winterized and left secured on site. Any equipment not capable of withstanding the harsh winter conditions will be removed from site and stored in either Yellowknife or Vancouver.

4.2 Water Supply System

Water pumps, filtering systems, water lines, and any other equipment associated with the water supply system will be drained and winterized. The water pump shed will be secured.

4.3 Sewage System

The sewage system will be drained with no graywater remaining in the discharge pipe. Solid waste will be incinerated.

4.4 Waste Incinerator

The fuel supply for the incinerator is shut off using a series of valves. The fuel remains in an artificial berm in the double-walled tank adjacent to the incinerator throughout the winter. The area will be inspected for petroleum spills or contamination. If such is the case, the issue will be addressed as outlined in Section 3.2.1.2.

4.5 Electrical System

The generator and surrounding area will be inspected for signs of spills and remaining wastes such as oil and grease. If topsoil is contaminated, an attempt will be made to remove as much of the spill as possible with enviromat; remaining contaminated soil will be stored in empty drums for disposal at an approved hazardous waste facility. The generator will be drained of its fuel. Remaining waste fuel, oil, and grease will be stored in approved storage containers which are labelled for that usage and reused during summer operations. The generator will be winterized and the shed will be secured for winter. Electrical wires, plugs, and sockets will remain in their installed locations. All electrical cords temporarily connected to a building or machinery during summer work program will be unplugged, rolled, and stored in the workshop.

4.6 Camp Heating Systems

Any 205-L fuel barrel attached to respective tent or building will be secured within the secondary containment container. The remaining fuel in the line will be allowed to burn out. The lid of the containment container will be secured to prevent snow from filling up the designated containment area. All empty propane cylinders will be transported to Yellowknife for recycling.

4.7 Petroleum Products and Storage Facilities

An on-site fuel cache is of great importance during camp start-up. Diesel fuel will be stored in the 13 double-walled envirotanks, and if necessary, 2 bladders within the lined, bermed tank farm. Minimal quantities of diesel and jet fuel in barrels will be stored within self-supporting artificial berms or in the engineered berm on site; these locations will be clearly marked to facilitate snow clearing activities during the following camp opening. The Site Superintendent will be responsible for determining the

possible access to these fuel resources prior to the start of the next exploration program.

Empty drums at remote drill sites will be transported to the Goose camp, crushed, banded to pallets and either stored for future backhaul or transported to Yellowknife for disposal/recycling. This work is typically done progressively as fuel caches are no longer required or as drill setups are dismantled.

Fuel farm secondary containment area will be cleared of any debris. In the springtime, meltwater within the containment area will be tested for the parameters listed in Table 3. If the analytical data confirms that the water meets regulatory criteria (Table 3), the water will then be released onto the tundra in such a manner as to avoid direct entry to a surface water body. Residual water remaining after pump out as well as collected rainwater are allowed to evaporate over the summer and are unlikely to present a volume issue at camp shutdown in the fall.

Table 3. Regulatory guidelines for hydrocarbons in soils

Parameter	Maximum concentration of any Grab Sample (µg/L)
Benzene	370
Toluene	2
Ethylbenzene	90
Phenols	20
Oil and Grease	5000
pH	6 to 9 (pH units)

The spill response team and camp management will be notified immediately of any spill based on actions outlined in the Comprehensive Spill Contingency Plan. The Environmental Coordinator, Site Superintendent or designate will ensure spills are reported as required and that the relevant form is filled out as completely as possible. Sabina will externally report all spills that meet type and volume criteria to the NWT/Nunavut Spill line. Sabina will internally track all spills which take place onsite regardless of the volume spilled.

4.8 Chemicals

Chemicals stored on site will consist of drill additives, oil, grease, drill salt, and household biodegradable cleaners. Chlorine is necessary and is used to treat our drinking water system. All drill additives are stored in poly-lined seacans and the remaining salt will be tarped and stored in designated areas on the property. Drill salt is in impermeable bags and stored on pallets. Empty bags will be disposed with combustible garbage. Sabina will inspect the storage area for possible spills and contamination.

4.9 Spill Response Kits

Sabina will carry out an inventory of the spill kits located on the property. Over the winter months, all spill kits will be relocated into a secured building, except for kits designated for the remaining petroleum storage areas.

4.10 Transportation

All transport areas will be inspected for contamination. Areas will be remediated using enviromat and removal of contaminated soil should any contamination be found.

4.11 Drill Sites

The diamond drills will be dismantled into the main components as per the drilling contractor procedure and secured along with ancillary equipment and drill rods. The drills will be moved by helicopter over the tundra and left at designated storage areas on the property and will undergo a drill close-out inspection. All drill sites will be inspected for contamination. Any remaining waste will be removed and disposed of accordingly. Diamond drill site restoration will commence as soon as practical after completion of the hole. Site clean-up of litter, debris, and drill fluids will commence immediately. Drill core and core boxes will be properly secured and stored at the designated core storage area. Photographs will be taken before and after the drilling has been completed.

4.12 General Camp Area

A general inspection of the camp area will be carried out. Waste items will be picked up, and areas contaminated by petroleum products unnoticed from the previous year will be reclaimed.

4.13 Final Documentation

A year-end inventory of all equipment and buildings remaining on site will be carried out prior to leaving site. Photos will be taken of the camp and drill laydown storage areas. Once the site is secured for winter, it will be documented with photos.

5.0 FINAL ABANDONMENT AND RESTORATION PLAN

5.1 Administration

5.1.1 Building Structures

All the reusable tents, frames, tarpaulins, and wooden structures will be dismantled and where possible be recycled for use at another exploration site.

Other combustible, non-recyclable building structures will be incinerated or burned onsite. Non-combustible structures or materials such as nails, screws, or metal frames will be recovered, packed, and transported off site for proper disposal.

5.1.2 Office and Household Furniture

All reusable office, household, kitchen, and recreational equipment will be packed and transported for use at other exploration camps. Some equipment, depending on what level of liability is accepted by Sabina, may be donated to local communities or schools. The equipment that is not reusable will be recycled or disposed of at an approved disposal facility, appropriate to the type of material.

5.1.3 Water Supply System

Water pumps, filtering systems, water lines, and any other equipment associated with the water supply system will be drained, disassembled, packed, and transported off site for use at other exploration camps.

Water lines that are not reusable will be disposed of at an approved facility.

5.1.4 Sewage System

The Pactos will be dismantled and relocated to another exploration camp or transported to Yellowknife for disposal. All lines from showers, washing machines, and sinks will be drained, disconnected, securely packed, and transported off site to an approved landfill site.

5.1.5 Waste Incinerator

Once the camp is entirely dismantled to the satisfaction of the supervisor in-charge, all remaining clean combustible waste will be burned. The incinerator will be dismantled and shipped to another exploration camp or to Yellowknife for sale or disposal in an approved facility.

5.1.6 Electrical System

All electrical wires will be removed from the buildings and any other installations at site. Extension cords and other fittings will be transported to other exploration camps for reuse. Used electrical wires will be packed and transported to Yellowknife for recycling. Unused bulbs and fluorescent tubes will be packed and relocated to other camps.

The generator shed and surrounding area will be inspected for signs of spills and remaining wastes such as oil and grease. The area will be cleaned as necessary.

The generator will be drained of fuel. Remaining waste fuel, oil, and grease will be stored in approved storage containers, labelled, and transported off site. The generator will be dismantled and transported off site to another exploration camp or to Yellowknife for sale.

5.1.7 Camp Heating Systems

Each 205-L fuel barrel attached to tents or buildings will be disconnected with the remaining fuel in the

line allowed to burn out. The drums will be appropriately labelled and stored with other petroleum products. The secondary containment container will be closed, secured, and stored ready for transportation off site. The fuel burner will be dismantled and remaining fuel will be allowed to drain off into waste oil collecting system. All fuel lines will be drained, disconnected, and packed for use in other camps or transported to an approved disposal facility. The area around each installation will be inspected for contamination and reclaimed as per the Comprehensive Spill Contingency Plan. All empty propane cylinders will be transported to Yellowknife for recycling.

5.1.8 Petroleum Products and Storage Facilities

5.1.8.1 205-Litre drums

The fuel storage area will consist of segregated groups of drums with empties stored separately from the full drums. An inventory of remaining fuel will be completed and all full drums will be inspected. Transportation of Dangerous Goods (TDG) labels will be attached to the drums before transportation off site. Remaining waste fuel will be labelled with TDG labels and transported to other camps for heating purposes or transported to Yellowknife for disposal in an approved facility.

In 2006 a drum crusher was purchased and located at Goose camp; one is also located at George camp. Empty drums will be crushed and palletized for backhaul and disposal. Some drums will be retained for waste containment and subsequent backhaul.

All unused jet fuel will be relocated to other exploration camps for use in further exploration programs, or returned to Yellowknife. The areas around the drums will be inspected for contamination.

5.1.8.2 Tidy Tanks

All Tidy tanks will be disconnected from any tents or buildings. All installations will be disconnected and drained. An inventory of the remaining fuel in each tank will be recorded. The tanks will be secured and transported to other camps or to Yellowknife for sale or disposal. The area around the tanks will be inspected for contamination.

5.1.8.3 Aboveground Storage Tanks and Bladders

All installations on respective tanks and bladders will be disconnected and various hatches inspected and locked. An inventory of the remaining fuel in each tank will be recorded and all fuel tanks will be drained prior to transportation. The AST tanks will only be moved during winter months to either another camp or using winter road to a designated area on the coast and loaded onto a barge for transportation to Hay River or to Yellowknife during summer months.

5.1.8.4 Lined Fuel Farm

Once AST tanks have been removed, the lined storage areas where the tanks were located will be inspected for contamination. If contamination is evident, then procedures outlined in the Comprehensive Spill Contingency Plan will be applied to reclaim the area.

Subsequently, the high-density polyethylene (HDPE) liner will be removed, rolled, and packed for transportation off site to either another exploration camp or an approved landfill. The berms will be graded with a front loader and levelled to a natural gradient and to cover any exposed areas.

5.1.9 Household Chemicals

Household cleaners will mainly be stored in the kitchen and mine dry/change room area. Upon camp closure, any unused products will either be transported to other camps or disposed of at an appropriate facility. Half-empty containers will be taken off site to be properly disposed in an approved discharge facility. Empty containers will either be recycled or disposed of with regular garbage, if appropriate.

5.1.10 Transportation

5.1.10.1 Airstrip

A very short emergency airstrip exists on naturally denuded material to the north of Goose Camp. The area will be cleared of any debris and inspected for potential top soil contamination due to aircraft refueling. If contamination is evident, then procedures outlined in the Comprehensive Spill Contingency Plan will be applied to reclaim the impacted area.

A 915 m all-weather airstrip that was installed in the 2013 exploration season will be cleared of any debris and inspected for potential contamination due to aircraft refueling. If contamination is evident, procedures outlined in the Comprehensive Spill Contingency Plan will be applied to reclaim the impacted area. The airstrip alignment would be scarified to support natural revegetation. The associated connecting all-weather road (approximately 600 m in length) be scarified and have culverts removed to support natural revegetation and surface water flow.

5.1.10.2 Jetty/Dock

The jetty, consisting of black plastic poly cells, will be removed and dismantled. The cells will be removed from site. Any timber, nails, screws, and metals frames will be packed and disposed with scrap metals in approved landfills.

5.1.10.3 Helipad

The four wooden helipads with refueling containment at Goose Camp will be dismantled and materials salvaged and recycled, or disposed of in an appropriate manner. The area will be cleared of any debris and inspected for contamination. If contamination is evident, then procedures outlined in the Spill Contingency Plan will be applied to reclaim the impacted area. The crushed rock foundation under the helipads will be scarified and allowed to revegetate naturally.

5.1.10.4 Rock Quarries

The rock quarries, accessed to provide construction and maintenance material for the all-weather airstrip and connecting road, will be cleared of any debris and inspected for hydrocarbon contamination. If contamination is evident, then procedures outlined in the Comprehensive Spill Contingency Plan will be applied to reclaim the impacted area. Loose material will be graded to ensure long term stability, and the final upper quarry edge will be delineated with visual markers. Note that the current quarry edge is delineated with visual markers.

5.2 Exploration

5.2.1 Drill Sites Management

The diamond drills will be dismantled into their main components as per the drilling contractor procedure, packaged, and secured along with its ancillary equipment and rods. The drills will be moved by helicopter over the tundra, inspected, and left at designated storage areas on the property before transporting off site.

All drill sites will be inspected for contamination. All wastes will be taken back to the camp by the drillers and disposed of as appropriate. As part of Sabina's progressive reclamation activities, diamond drill sites will be restored as soon as practical after the drill has been moved to the next site. Photos are taken prior to and after the drill work is completed and an inspection sheet is in place for the geologist to verify the site was left in good condition.

5.2.2 Drill Holes Management

5.2.2.1 Drill sump

All drill sumps (if constructed) will be recontoured and allowed to naturally revegetate. Natural sumps (if used) will simply be allowed to revegetate.

5.2.2.2 Iron Casing Management

Casing protruding above ground will be cut off to a level that will not pose a hazard and capped. The cut portion will be disposed of in an approved landfill in Yellowknife or recycled as scrap metal. Drill holes which encounter artesian water flow will be plugged with cement and capped. The collar locations of all holes will be surveyed in and will be recorded in the exploration reports.

5.2.3 Chemicals associated with Drilling Operations

5.2.3.1 Drill Additives, Cement, and Salt Management

All remaining drill additives and salt will be inventoried, packed, and transported to other projects or transported to Yellowknife or Hay River for re-sale or disposal at an appropriate facility. Empty

containers and pallets will be incinerated (pallets), recycled if possible or disposed of with regular garbage.

5.2.4 Drill Core

Drill core will be properly secured and stored at a designated core storage area on the property for long-term storage. A site reference plan will be maintained to catalogue the core.

5.2.5 Excavated Trenches

Any excavated trenches will be backfilled with local material. The area will be recontoured to match the surrounding landscape, and allowed to revegetate naturally.

5.3 Environmental

5.3.1 Long-term Monitoring

Ongoing monitoring will be conducted during the summer months to ensure the area has been cleared of any hazards that may cause a significant adverse impact to the receiving environment. The monitoring will continue on a set schedule after the final abandonment until the land is relinquished and accepted by the owner. Weather collection data (Goose/George weather stations) and environmental baseline data (e.g. water sampling data) will be turned over to whoever takes over the property.

5.3.2 Documentation and Final Inspection

A detailed project site reclamation and remediation report will be created by Sabina which will specifically document and catalogue project reclamation activities. This report will be generated for distribution to specific governing agencies. This report will identify all reclamation efforts undertaken at the project site and will be supported with information pertaining to contractors used, methodology, costs, and findings. Digital photographs will be taken which will support the reclamation activities. These will be appended to the report.

5.3.3 Land Relinquishment

Once the reclamation plan is accepted and approved by Sabina, the permit holder will invite and organize a final site inspection visit with community representatives, Land Inspectors, Nunavut Water Board and the KIA. Other government organizations such as Environment Canada and Department of Fisheries and Oceans will be invited to visit the area. A written submission will be sent to the regulatory authorities asking to relinquish the land.

5.4 Abandonment & Restoration Cost Estimates

The total cost estimation for the Abandonment and Restoration Plan for the Project is presented in

Appendix B. The approximate costing will be reviewed annually relative to the long-term exploration strategy for the Project and may include the following items:

- Infrastructure Demolition Cost;
- Transportation – (Labour, equipment, recycle, relocation of waste, etc.);
- Labour Cost;
    - Offsite Administrative Cost;
    - Contractor;
- Rehabilitation Cost;
    - Site Supervision – (Sabina);
    - Remedial supplies;
    - Native species supplies;
    - Contractor;
- Environmental Monitoring Cost;
    - Labour - (Sabina or Contractor);
    - Transportation – (Field sampling);
    - Analytical Cost – (External Lab);
    - Reporting – (Sabina or Contractor);
    - Consultant Costs;
- Final Documentation – (Labour Cost – Sabina or Contractor); and
- Land Relinquishment – (Travel, Reports, Site Visits, Meetings, etc.).

6.0 REVIEW OF THE ABANDONMENT AND RESTORATION PLAN

The Back River Abandonment & Restoration Plan will be reviewed on an annual basis. The next planned internal review is scheduled to take place in 2019.

APPENDIX A – MAPS, FIGURES, AND PHOTOS GOOSE CAMP AND EXPLORATION PROJECT

Figure 1. Sabina's Exploration Properties and Mineral Tenures Map, western Nunavut (as of Dec 2018).

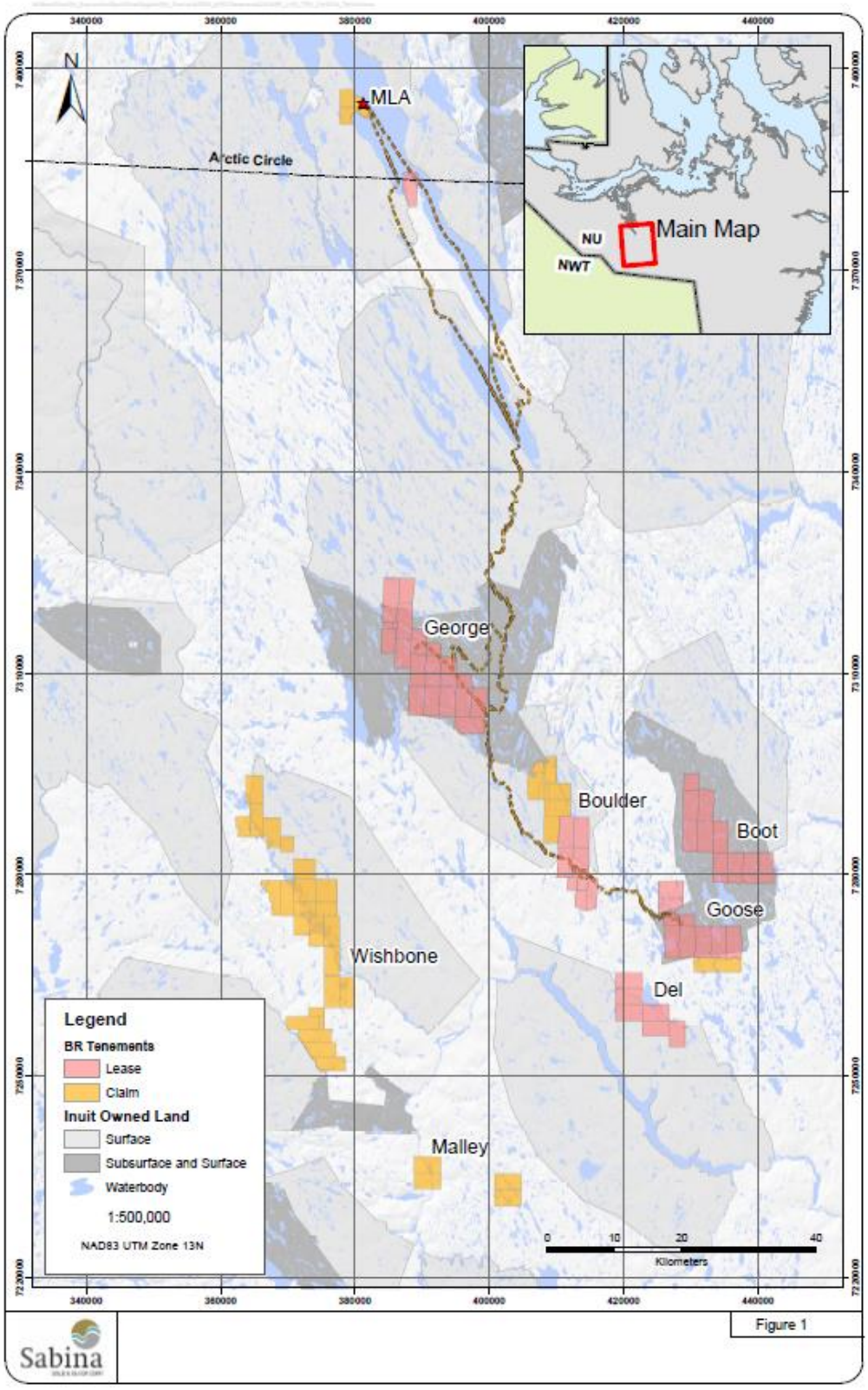


Figure 2. Aerial view of Goose Camp.
(Photo taken August 2013; no infrastructure changes through Dec 2018)

APPENDIX B – ABANDONMENT & RECLAMATION COST ESTIMATE

BACK RIVER RECLAMATION ESTIMATE - GOOSE December 2018

ACTIVITY/MATERIAL	UNITS	QUANTITY	UNIT COST	COST	
Exploration Activities					
DRILLHOLE RECLAMATION					
Cement (30kg)	Bags	-	$16	$0	
Helicopter support	Hours	5	$1,762	$8,810	
Personnel - cut casing and cement	Staff Days	14	$446	$6,248	
TRENCH					
Personnel - Backfill trenches/recontour	Staff Days	1	$446	$ 446	
Subtotal Exploration Activities				**$15,505**	**$15,505**
Building and Equipment					
EQUIPMENT					
Personnel - Disassemble and packup	Staff Days	70	$446	$31,242	
Personnel - Other (unused drilling steel/material)	Staff Days	50	$446	$22,316	
BUILDINGS					
Personnel - Disassemble Buildings & Burn Wood	Staff Days	270	$446	$120,505	
SPECIALIZED ITEMS					
Helicopter support	Hours	10	$1,762	$17,620	
Subtotal Buildings and Equipment				**$191,683**	**$191,683**
Chemicals and Contaminated Soils					
FUEL					
Disposal once off-site: diesel, Jet A/B, aviation gas	Litres	237,231	$0.43	$102,009	
WASTE OIL					
Oils/lubricants - disposal once off-site	Litres	-	$0.43	$0	
OTHER					
Helicopter support	Hours	-	$1,762	$0	
Subtotal Chemicals and Contaminated Soils				**$102,009**	**$102,009**
Mobilization and Camp Operation					
MOBILIZE HEAVY EQUIPMENT FROM SITE TO REGIONAL CENTRE					
Personnel - Overland Transport	Staff Days	520	$446	$232,083	
Barge	lump sum	1	$280,000	$280,000	
Helicopter support	Hours	8	$1,762	$14,096	
Herc Flight	Flights	1	$40,000	$40,000	
CAMP OPERATION					
Personnel - Site Support (cook, first aid, super)	Staff Days	300	$0	$0	
Camp Man-days	Staff Days	1,245	$407	$507,119	
Subtotal Mobilization				**$1,073,298**	**$1,073,298**
Clean up and Reclamation					
RECLAIM CAMP, ROADS & AIRSTRIP					
Personnel - Scarify and install water breaks	Staff Days	20	$446	$8,926	
Revegetation (fertilizer & peat)	Bulk	2	$12,000	$24,000	
Subtotal Reclamation				**$32,926**	**$32,926**
Post Closure Monitoring					
MONITORING DURING RECLAMATION					
Water Sampling	Each	16	$500	$8,000	
Helicopter Support	hours	3	$1,762	$5,286	
POST CLOSURE INSPECTIONS					
Annual Inspection	each	1	$20,000	$20,000	
PERMITTING & CLOSE OUT REPORT	lump sum			$15,000	
Subtotal Post Closure Monitoring and Maintenance				**$48,286**	**$48,286**

Subtotal Capital Costs to Close			$1,463,707
PROJECT MANAGEMENT (Assumes Third Party Costs)	5	% of subtotal	$73,185
CONTINGENCY	10	% of subtotal	$146,371
GRAND TOTAL - CAPITAL COSTS			**$1,683,263**

NOTES: 2018 Assumptions

- Assumes Goose is closed and reclaimed as part of progressive reclamation during exploration.
- That leaving the site will be "controlled" exit with more than one season available to complete.
- That all improvements and assets will be removed and site returned to stable conditions.
- Every effort will be taken to minimize time to complete.
- Unit cost sources are outlined in spreadsheet and where available recent and appropriate site-specific data is used.
- Mobilization off-site will be principally via Cat-Haul to Bathurst inlet and then barge.
- Demobilization of drill rigs and drill equipment/supplies/material to be completed under contractual agreement.
- Post closure monitoring and inspection will occur at end of final reclamation work, and for 1 year post closure.
- Barge costs are shared between both sites on a load portion basis (80% Goose, 20% George).
- Work is based on current inventory of diesel fuel at site; assumes that excess fuel will be disposed of off-site.