



BACK RIVER PROJECT

2021 Annual Report for Water Licence 2BE-GOO2028

**Prepared by
Sabina Gold and Silver Corp.**

**Prepared for
Nunavut Water Board**

March 2022

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Acronyms

CIRNAC	Crown Indigenous Relations and Northern Affairs Canada
KIA	Kitikmeot Inuit Association
The Licence	Water Licence 2BE-GOO2028
NIRB	Nunavut Impact Review Board
MLA	Marine Laydown Area
NWB	Nunavut Water Board
The Project	Back River Project
Sabina	Sabina Gold & Silver Corp.

- A summary report of water use and waste disposal;
- A list of unauthorized discharges and a summary of follow-up actions taken;
- Any revisions to plans under this Licence;
- A description of all progressive and or final reclamation work undertaken, if any, including photographic records of site conditions before, during and after completion of operations;
- A report of any artesian flow occurrences; and
- Any other details on water use or waste disposal requested by the Board.

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[illegible]

1. Introduction

This report to the Nunavut Water Board (NWB) has been prepared to summarize the project activities and monitoring undertaken by Sabina Gold and Silver Corp. (Sabina) during the 2021, in accordance with Part B, Item 2 of License 2BE-GOO2028 (the Licence). This License was renewed without change on Feb 17th 2020 and will expire on February 18, 2028. The NWB Annual Report Form can be found in Appendix A of this report.

Key activities associated with the Goose Lake Project in 2021 are summarized as follows:

- Operation of the Goose Exploration Camp for exploration drilling and to support Water Licence 2AM-BRP1831 construction activities
- Exploration drilling
- Drill site reclamation

During 2021, fresh water was utilized for both camp use 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. All water utilized was metered as per water license requirements.

Waste management included the handling of pack waste, domestic waste in an incinerator, hazardous waste and drill waste. Waste incineration and waste backhaul details are reported in the Annual Report for Water Licence 2AM-BRP1831.

Prior to seasonal cessation of drilling, Sabina reclaimed all 2021 drill sites. Materials removed from sites included any 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. Sabina intends to continue to cut and restore historic drill site as part of regular programs in 2022. Ongoing reclamation programs will be documented as conducted in previous programs.

Sabina did not host an inspection under this Licence in 2021. Community consultation undertaken by Sabina in 2021 is outlined in the Annual Report for Water Licence 2AM-BRP1831.

2. Annual Report per Part B, Item 2

This section of the report has been constructed to address each of the requirements of Part B, Item 2 of the Licence. For ease of comparison, each subheading corresponds directly with the identically alphabetized subheading of Part B, Item 2 of Water Licence 2BE- GOO2028.

A. SUMMARY OF WATER USE AND WASTE DISPOSAL

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. Appendix B summarizes daily water used for Goose Camp, all of which was withdrawn from Goose Lake. Total annual camp water usage was 2,276 m³, daily camp water usage did not exceed the 30 m³/day.

Drill water was only obtained from Goose Lake in 2021. Daily drill water usage is provided in Appendix C by water source. The Licence specifies a daily water usage allowance of up to 267 m³ for drilling purposes. This daily allowance was not exceeded in 2021. Total annual drill water usage was 394 m³.

Wastes disposed of under this Licence include greywater, latrine, non-hazardous and hazardous wastes and drill wastes. All Waste storage area locations are provided in Table 2.A-1. 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. Approximately 10 m³ of water was discharged from the Goose fuel berm in 2021.

Table 2.A-1. Goose Waste Storage Locations

Description	UTM Coordinates (NAD83)		Latitude	Longitude
	Easting	Northing		
	(m)	(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"

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 site to an approved disposal facility in Yellowknife.

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.

Types and quantities of solid wastes incinerated, open burned or backhauled from the Back River Project, including from the Goose Property, are detailed in the Annual Report for Water Licence 2AM-BRP1831.

For drilling activities, sumps consisted of an excavated trench at the Goose camp where drill cuttings were deposited. Coordinates of all cutting disposal sites are maintained and are available on request. Continual inspections were conducted of these locations to ensure stability of areas.

The drilling program utilizes 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.

B. UNAUTHORIZED DISCHARGES

No spills meeting or exceeding the NWT/NU spill reporting thresholds occurred in 2021.

C. MANAGEMENT PLAN REVISIONS

Sabina did not revise any management plans under this Licence in 2021.

D. PROGRESSIVE AND FINAL RECLAMATION

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. Restoration of historic drill sites will continue as practical. As in previous years, ongoing reclamation programs will continue to be documented.

E. ARTESIAN FLOWS

No artesian flows were encountered in 2021.

F. INFORMATION REQUESTS AND RESULTS OF MONITORING PROGRAM

Daily quantities of water used and wastes generated under this Licence are discussed in Section 2.A of this report. Project water source locations are provided in Table 2.F-1.

Personnel were on site at the Goose Property from March onwards in 2021. No runoff was observed and no sampling under Part J, Item 8 was required.

As no construction applicable to this Licence took place in 2021, no construction-related sampling was conducted under this Licence.

The Goose Bulk Fuel Storage Facility (GOO-2) was sampled prior to discharge and results of sampling are provided in Table 2.F-2. No exceedances of discharge criteria were noted.

Ice drilling took place in 2021 and a pre-drilling under ice water quality sample was collected as well as multiple post-drilling water quality samples. Total Suspended Sediment (TSS) results are presented in Table 2.F-3 and full sample analytical results are provided in Appendix D. All post-drilling TSS concentrations were below 10 mg/L except for one sample collected on April 25th, 2021 (Table 2.F-3).

No inspections were conducted by CIRNAC under this Licence in 2021.

Table 2.F-1. Goose Project Water Source Locations

Description	UTM Coordinates (NAD83)		Latitude	Longitude
	Easting	Northing		
	(m)	(m)		
Goose Project				
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 2.13-1 Berm Discharge Water Quality Results

	Benzene (mg/L)	Toluene (mg/L)	Ethylbenzene (mg/L)	Phenols	Oil and Grease (mg/L)	pH
Max Grab Concentration	0.37	0.002	0.09	0.02	5	Between 6.0 and 9.5
Goose Fuel Berm (GOO-2)	<0.00050	<0.00050	0.00121	-*	<5	6.67

**this parameter was accidentally omitted*

Table 2.F-3. Goose Project Pre and Post Drilling Under Ice TSS

	Pre Drilling	Post Drilling	Post Drilling	Post Drilling	Post Drilling	Post Drilling
Date	29-03-2021	07-04-2021	14-04-2021	25-04-2021	03-05-2021	04-06-2021
TSS (mg/L)	<3.0	<3.0	<3.0	29.3	3.3	7.9

G. BOARD REQUESTS RE: WATER USE AND WASTE DISPOSAL

No requests related to water use or waste disposal were made by the Board in 2021 in relation to this Licence.

Appendix A NWB Annual Report Form

NWB Annual Report

Year being reported:

Select ▼

2021

License No: 2BE-GOO2028

Issued Date:

February 19, 2020

Expiry Date:

February 20, 2028

Project Name: GOOSE LAKE, BACK RIVER PROJECT

Licensee: SABINA GOLD AND SILVER CORP

Mailing Address:

#1800 - 555 Burrard Street, Box 220, Vancouver, BC,
V7X 1M7

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 accordance 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, Llama Lake

Water Quantity:

30

Quantity Allowable Domestic (cu.m/day)

2,276

Actual Quantity Used Domestic (cu.m/yr)

267

Quantity Allowable Drilling (cu.m/day)

394

Total Quantity Used Drilling (cu.m/yr)

Waste Management and/or Disposal

☒ Solid Waste Disposal☒ Sewage☒ Drill Waste☒ Greywater☒ Hazardous☐ Other:

Additional Details:

See Sections 2.A and 2.G of the 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)

See Section 2.B of the Report

Revisions to the Spill Contingency Plan

SCP submitted and approved - no revision required or proposed



Additional Details:

See Section 2.C of Annual Report.

Revisions to the Abandonment and Restoration Plan

AR plan submitted and approved - no revision required or proposed



Additional Details:

See Section 2.C of Annual Report.

Progressive Reclamation Work Undertaken

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

See Section 2.D 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:

See Section 2.F of the 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:

See Section 2.A of the 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)

See Section 2.F of the Annual Report

Any additional comments or information for the Board to consider

Date Submitted:
Submitted/Prepared by:
Contact Information:

April 1, 2021
Merle Keefe/Katsky Venter
Tel:
Fax:
email: mkeefe@sabinagoldsilver.com

Appendix B Goose Daily Camp Water Usage

Goose Lake Camp Water Usage

Date	Total Goose Camp Water Usage (m3)	Date	Total Goose Camp Water Usage (m3)	Date	Total Goose Camp Water Usage (m3)	Date	Total Goose Camp Water Usage (m3)	Date	Total Goose Camp Water Usage (m3)	Date	Total Goose Camp Water Usage (m3)
6-Mar-21	4.9047	25-Apr-21	6.2602	14-Jun-21	8.8402	3-Aug-21	7.3137	22-Sep-21	14.0148	11-Nov-21	7.7929
7-Mar-21	2.0363	26-Apr-21	8.5036	15-Jun-21	6.9612	4-Aug-21	8.2144	23-Sep-21	9.7651	12-Nov-21	6.1485
8-Mar-21	2.383	27-Apr-21	7.1355	16-Jun-21	6.6447	5-Aug-21	4.4258	24-Sep-21	10.765	13-Nov-21	9.2533
9-Mar-21	4.7006	28-Apr-21	8.0367	17-Jun-21	12.32	6-Aug-21	4.8798	25-Sep-21	6.4025	14-Nov-21	10.4939
10-Mar-21	4.5723	29-Apr-21	5.9248	18-Jun-21	7.1142	7-Aug-21	5.6044	26-Sep-21	11.3839	15-Nov-21	5.5
11-Mar-21	2.038	30-Apr-21	5.9777	19-Jun-21	7.3272	8-Aug-21	8.0777	27-Sep-21	11.1294	16-Nov-21	6.784
12-Mar-21	3.0454	1-May-21	7.4369	20-Jun-21	5.9867	9-Aug-21	5.6893	28-Sep-21	9.7289	17-Nov-21	10.4399
13-Mar-21	1.4901	2-May-21	7.07	21-Jun-21	6.6801	10-Aug-21	5.0382	29-Sep-21	11.0466	18-Nov-21	8.1121
14-Mar-21	5.7047	3-May-21	7.5528	22-Jun-21	5.7131	11-Aug-21	8.8348	30-Sep-21	10.4006	19-Nov-21	6.8597
15-Mar-21	2.6679	4-May-21	5.4974	23-Jun-21	5.8214	12-Aug-21	8.8494	1-Oct-21	10.5608	20-Nov-21	8.4981
16-Mar-21	2.7526	5-May-21	6.6751	24-Jun-21	5.3209	13-Aug-21	7.0884	2-Oct-21	9.4744	21-Nov-21	7.3383
17-Mar-21	4.8627	6-May-21	6.5658	25-Jun-21	5.8453	14-Aug-21	4.9772	3-Oct-21	9.4504	22-Nov-21	6.2808
18-Mar-21	2.318	7-May-21	5.799	26-Jun-21	5.4931	15-Aug-21	5.4946	4-Oct-21	9.6214	23-Nov-21	7.8871
19-Mar-21	4.5914	8-May-21	7.5383	27-Jun-21	4.9078	16-Aug-21	12.0622	5-Oct-21	9.8352	24-Nov-21	7.5575
20-Mar-21	2.9506	9-May-21	6.4102	28-Jun-21	5.4676	17-Aug-21	11.9311	6-Oct-21	9.7061	25-Nov-21	7.5442
21-Mar-21	3.9121	10-May-21	8.6506	29-Jun-21	5.6319	18-Aug-21	6.7006	7-Oct-21	10.0522	26-Nov-21	7.2726
22-Mar-21	5.6646	11-May-21	3.4108	30-Jun-21	9.6869	19-Aug-21	11.2126	8-Oct-21	8.3929	27-Nov-21	7.7947
23-Mar-21	2.8473	12-May-21	8.9247	1-Jul-21	6.3731	20-Aug-21	11.4294	9-Oct-21	8.2098	28-Nov-21	7.4258
24-Mar-21	0.6114	13-May-21	7.0104	2-Jul-21	6.7649	21-Aug-21	6.3579	10-Oct-21	9.7496	29-Nov-21	6.737
25-Mar-21	6.1068	14-May-21	7.7943	3-Jul-21	7.3819	22-Aug-21	12.1153	11-Oct-21	5.1993	30-Nov-21	8.975
26-Mar-21	4.7742	15-May-21	6.9903	4-Jul-21	9.2953	23-Aug-21	8.6964	12-Oct-21	6.8782	1-Dec-21	8.8823
27-Mar-21	6.878	16-May-21	6.172	5-Jul-21	9.4069	24-Aug-21	7.6125	13-Oct-21	9.503	2-Dec-21	9.2872
28-Mar-21	5.4017	17-May-21	4.1895	6-Jul-21	7.5477	25-Aug-21	5.019	14-Oct-21	10.9124	3-Dec-21	8.5973
29-Mar-21	5.727	18-May-21	5.7957	7-Jul-21	7.5888	26-Aug-21	7.5608	15-Oct-21	8.8813	4-Dec-21	6.0644
30-Mar-21	5.8661	19-May-21	5.4949	8-Jul-21	8.1851	27-Aug-21	6.2461	16-Oct-21	6.9496	5-Dec-21	5.8953
31-Mar-21	7.8015	20-May-21	11.5283	9-Jul-21	6.5593	28-Aug-21	6.8831	17-Oct-21	6.7465	6-Dec-21	5.7525
1-Apr-21	4.3823	21-May-21	9.5548	10-Jul-21	9.8029	29-Aug-21	7.509	18-Oct-21	8.0559	7-Dec-21	8.152
2-Apr-21	5.283	22-May-21	7.7423	11-Jul-21	10.3075	30-Aug-21	8.9502	19-Oct-21	7.2512	8-Dec-21	10.1826
3-Apr-21	8.9159	23-May-21	8.7175	12-Jul-21	7.977	31-Aug-21	5.8077	20-Oct-21	6.5917	9-Dec-21	10.805
4-Apr-21	7.6596	24-May-21	10.5454	13-Jul-21	7.8405	1-Sep-21	5.2011	21-Oct-21	7.8786	10-Dec-21	7.7201
5-Apr-21	7.2387	25-May-21	7.9937	14-Jul-21	9.369	2-Sep-21	10.6264	22-Oct-21	9.1136	11-Dec-21	8.4345
6-Apr-21	14.5613	26-May-21	8.625	15-Jul-21	8.1248	3-Sep-21	11.6656	23-Oct-21	7.4349	12-Dec-21	7.6521
7-Apr-21	8.1229	27-May-21	13.5324	16-Jul-21	6.9927	4-Sep-21	14.7108	24-Oct-21	7.996	13-Dec-21	8.2745
8-Apr-21	6.418	28-May-21	9.2567	17-Jul-21	6.3815	5-Sep-21	8.4293	25-Oct-21	9.3041	14-Dec-21	7.7866
9-Apr-21	6.3434	29-May-21	12.6742	18-Jul-21	7.0952	6-Sep-21	8.7975	26-Oct-21	10.6659	15-Dec-21	8.5341
10-Apr-21	8.0054	30-May-21	6.021	19-Jul-21	9.6057	7-Sep-21	8.2023	27-Oct-21	9.0421	16-Dec-21	5.7035
11-Apr-21	8.2584	31-May-21	10.9269	20-Jul-21	16.9827	8-Sep-21	10.453	28-Oct-21	6.9581	17-Dec-21	7.4058
12-Apr-21	8.5573	1-Jun-21	10.3651	21-Jul-21	12.0883	9-Sep-21	8.5275	29-Oct-21	11.6807	18-Dec-21	12.0914
13-Apr-21	7.8642	2-Jun-21	9.5653	22-Jul-21	11.8168	10-Sep-21	9.2064	30-Oct-21	10.611		
14-Apr-21	6.812	3-Jun-21	10.6808	23-Jul-21	7.7734	11-Sep-21	8.5574	31-Oct-21	11.6809		
15-Apr-21	7.5297	4-Jun-21	10.1924	24-Jul-21	7.9502	12-Sep-21	10.6067	1-Nov-21	9.0365		
16-Apr-21	9.0333	5-Jun-21	9.1919	25-Jul-21	7.9604	13-Sep-21	10.5074	2-Nov-21	7.2801		
17-Apr-21	4.3472	6-Jun-21	8.4871	26-Jul-21	8.1302	14-Sep-21	11.2247	3-Nov-21	6.9064		
18-Apr-21	7.3226	7-Jun-21	8.0158	27-Jul-21	7.0026	15-Sep-21	11.061	4-Nov-21	11.9695		
19-Apr-21	4.7019	8-Jun-21	7.4385	28-Jul-21	7.4914	16-Sep-21	10.1005	5-Nov-21	9.5977		
20-Apr-21	7.005	9-Jun-21	9.8677	29-Jul-21	9.0174	17-Sep-21	9.5017	6-Nov-21	7.732		
21-Apr-21	8.5906	10-Jun-21	12.2348	30-Jul-21	9.0887	18-Sep-21	9.752	7-Nov-21	11.1749		
22-Apr-21	6.8999	11-Jun-21	7.2267	31-Jul-21	6.2676	19-Sep-21	10.2488	8-Nov-21	9.6014		
23-Apr-21	4.4763	12-Jun-21	8.2515	1-Aug-21	6.4428	20-Sep-21	14.7071	9-Nov-21	9.228		
24-Apr-21	4.655	13-Jun-21	7.2313	2-Aug-21	8.0976	21-Sep-21	12.2901	10-Nov-21	11.5913		

Appendix C Goose Daily Drill Water Usage

Daily Drill Water Usage by Source

Date	Goose Total Daily Usage (m3)
31-Mar-21	15.837
1-Apr-21	15.838
2-Apr-21	15.12667
3-Apr-21	7.36086
4-Apr-21	11.42527
5-Apr-21	7.6225
6-Apr-21	17.1106
7-Apr-21	12.1116
8-Apr-21	7.1308
9-Apr-21	18.3014
10-Apr-21	6.3569
11-Apr-21	2.2904
12-Apr-21	10.784
13-Apr-21	4.6999
14-Apr-21	8.7561
15-Apr-21	7.2376
16-Apr-21	6.474
17-Apr-21	5.9094
18-Apr-21	9.7872

Date	Goose Total Daily Usage (m3)
19-Apr-21	13.6818
20-Apr-21	11.113
21-Apr-21	2.033
22-Apr-21	14.908
23-Apr-21	29.344
24-Apr-21	12.006
25-Apr-21	21.233
26-Apr-21	17.35
27-Apr-21	9.122
21-May-21	2.487
22-May-21	2.716
23-May-21	6.355
24-May-21	10.248
25-May-21	16.674
26-May-21	8.505
27-May-21	14.008
28-May-21	3.892
29-May-21	3.941
30-May-21	3.793

Appendix D Water Quality Analytical Results

CERTIFICATE OF ANALYSIS

Work Order : **YL2100212**
Client : **Sabina Gold & Silver Corporation**
Contact : Merle Keefe
Address : 375 - 555 Burrard St. Box 220, Bentall 2
 Vancouver BC Canada V7X 1M7
Telephone : 604 240 6619
Project : ----
PO : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : 2021 Under-Ice Field Program
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 4
Laboratory : Yellowknife - Environmental
Account Manager : Oliver Gregg
Address : 314 Old Airport Road, Unit 116
 Yellowknife NT Canada X1A 3T3
Telephone : 1 867 446 5593
Date Samples Received : 29-Mar-2021 16:45
Date Analysis Commenced : 03-Apr-2021
Issue Date : 09-Dec-2021 16:13

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia
Shaneel Dayal	Analyst	Metals, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
µg/L	micrograms per litre
µS/cm	Microsiemens per centimetre
mg/L	milligrams per litre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Water					Client sample ID	Goose Lake Pre	----	----	----	----
(Matrix: Water)										
Client sampling date / time					29-Mar-2021 10:42	----	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100212-001	-----	-----	-----	-----	-----
					Result	----	----	----	----	----
Physical Tests										
conductivity	----	E100	2.0	µS/cm	83.2	----	----	----	----	----
pH	----	E108	0.10	pH units	6.74	----	----	----	----	----
solids, total suspended [TSS]	----	E160-H	3.0	mg/L	<3.0	----	----	----	----	----
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0598	----	----	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	----	----	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00050	----	----	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L	0.0139	----	----	----	----	----
beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	----	----	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	----	----	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L	<0.010	----	----	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000090	----	----	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L	6.70	----	----	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L	0.000011	----	----	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L	0.00064	----	----	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00088	----	----	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L	0.00461	----	----	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L	0.166	----	----	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L	0.00242	----	----	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L	0.0020	----	----	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L	4.12	----	----	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L	0.0300	----	----	----	----	----
mercury, total	7439-97-6	E508-L	0.00050	µg/L	0.00093	----	----	----	----	----
molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000058	----	----	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L	0.0105	----	----	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	----	----	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L	0.797	----	----	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00164	----	----	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L	0.000061	----	----	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L	1.19	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	Goose Lake Pre	----	----	----	----
(Matrix: Water)										
					Client sampling date / time	29-Mar-2021 10:42	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100212-001	-----	-----	-----	-----	
					Result	----	----	----	----	
Total Metals										
silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010	----	----	----	----	
sodium, total	17341-25-2	E420	0.050	mg/L	2.03	----	----	----	----	
strontium, total	7440-24-6	E420	0.00020	mg/L	0.0318	----	----	----	----	
sulfur, total	7704-34-9	E420	0.50	mg/L	5.84	----	----	----	----	
tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	----	----	----	----	
thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010	----	----	----	----	
thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	----	----	----	----	
tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	----	----	----	----	
titanium, total	7440-32-6	E420	0.00030	mg/L	0.00054	----	----	----	----	
tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010	----	----	----	----	
uranium, total	7440-61-1	E420	0.000010	mg/L	0.000021	----	----	----	----	
vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	----	----	----	----	
zinc, total	7440-66-6	E420	0.0030	mg/L	0.0137	----	----	----	----	
zirconium, total	7440-67-7	E420	0.00020	mg/L	0.00024	----	----	----	----	

Please refer to the General Comments section for an explanation of any qualifiers detected.

CERTIFICATE OF ANALYSIS

Work Order : **YL2100253**
Client : **Sabina Gold & Silver Corporation**
Contact : Merle Keefe
Address : 375 - 555 Burrard St. Box 220, Bentall 2
 Vancouver BC Canada V7X 1M7
Telephone : 604 240 6619
Project : ----
PO : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : Q45187
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 4
Laboratory : Yellowknife - Environmental
Account Manager : Oliver Gregg
Address : 314 Old Airport Road, Unit 116
 Yellowknife NT Canada X1A 3T3
Telephone : 1 867 446 5593
Date Samples Received : 09-Apr-2021 15:30
Date Analysis Commenced : 14-Apr-2021
Issue Date : 09-Dec-2021 16:13

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

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Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
µS/cm	Microsiemens per centimetre
mg/L	milligrams per litre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

<i>Qualifier</i>	<i>Description</i>
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)					Client sampling date / time	07-Apr-2021 11:34	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100253-001	Result	----	----	----	----
Physical Tests										
conductivity	----	E100	2.0	µS/cm	87.8	----	----	----	----	----
pH	----	E108	0.10	pH units	6.97	----	----	----	----	----
solids, total suspended [TSS]	----	E160-H	3.0	mg/L	<3.0	----	----	----	----	----
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0421	----	----	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	----	----	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00056	----	----	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L	0.0135	----	----	----	----	----
beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	----	----	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	----	----	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L	<0.010	----	----	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000100	----	----	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L	6.89	----	----	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L	0.000012	----	----	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	----	----	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00073	----	----	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L	0.00420	----	----	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L	0.118	----	----	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L	0.00196	----	----	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L	0.0014	----	----	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L	4.14	----	----	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L	0.0265	----	----	----	----	----
mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	----	----	----	----	----
molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000055	----	----	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L	0.0104	----	----	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	----	----	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L	0.732	----	----	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00163	----	----	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L	0.000058	----	----	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L	1.25	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)					Client sampling date / time	07-Apr-2021 11:34	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YLM2100253-001	Result	----	----	----	----
Total Metals										
silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010		----	----	----	----
sodium, total	17341-25-2	E420	0.050	mg/L	1.47		----	----	----	----
strontium, total	7440-24-6	E420	0.00020	mg/L	0.0337		----	----	----	----
sulfur, total	7704-34-9	E420	0.50	mg/L	6.41		----	----	----	----
tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020		----	----	----	----
thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010		----	----	----	----
thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010		----	----	----	----
tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010		----	----	----	----
titanium, total	7440-32-6	E420	0.00030	mg/L	<0.00060 ^{DLM}		----	----	----	----
tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010		----	----	----	----
uranium, total	7440-61-1	E420	0.000010	mg/L	0.000020		----	----	----	----
vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050		----	----	----	----
zinc, total	7440-66-6	E420	0.0030	mg/L	0.0041		----	----	----	----
zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020		----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

CERTIFICATE OF ANALYSIS

Work Order : **YL2100286**
Client : **Sabina Gold & Silver Corporation**
Contact : Merle Keefe
Address : 375 - 555 Burrard St. Box 220, Bentall 2
 Vancouver BC Canada V7X 1M7
Telephone : 604 240 6619
Project : ----
PO : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : Q45187
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 4
Laboratory : Yellowknife - Environmental
Account Manager : Oliver Gregg
Address : 314 Old Airport Road, Unit 116
 Yellowknife NT Canada X1A 3T3
Telephone : 1 867 446 5593
Date Samples Received : 16-Apr-2021 14:00
Date Analysis Commenced : 21-Apr-2021
Issue Date : 09-Dec-2021 16:14

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

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- Analytical Results

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Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Dan Gebert	Laboratory Analyst	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia



General Comments

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Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
µS/cm	Microsiemens per centimetre
mg/L	milligrams per litre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)					Client sampling date / time	14-Apr-2021 14:11	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100286-001	Result	-----	-----	-----	-----
Physical Tests										
conductivity	----	E100	2.0	µS/cm	95.1	----	----	----	----	----
pH	----	E108	0.10	pH units	6.84	----	----	----	----	----
solids, total suspended [TSS]	----	E160-H	3.0	mg/L	<3.0	----	----	----	----	----
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0644	----	----	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	----	----	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00054	----	----	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L	0.0137	----	----	----	----	----
beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	----	----	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	----	----	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L	<0.010	----	----	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000141	----	----	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L	7.37	----	----	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L	0.000012	----	----	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L	0.00261	----	----	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00022	----	----	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L	0.00534	----	----	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L	0.110	----	----	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L	0.00375	----	----	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L	0.0018	----	----	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L	4.42	----	----	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L	0.00951	----	----	----	----	----
mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	----	----	----	----	----
molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000083	----	----	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L	0.0124	----	----	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	----	----	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L	0.909	----	----	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00189	----	----	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L	0.000074	----	----	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L	1.34	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)										
					Client sampling date / time	14-Apr-2021 14:11	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100286-001	-----	-----	-----	-----	
					Result	----	----	----	----	
Total Metals										
silver, total	7440-22-4	E420	0.000010	mg/L	0.000010	----	----	----	----	
sodium, total	17341-25-2	E420	0.050	mg/L	1.65	----	----	----	----	
strontium, total	7440-24-6	E420	0.00020	mg/L	0.0335	----	----	----	----	
sulfur, total	7704-34-9	E420	0.50	mg/L	5.81	----	----	----	----	
tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	----	----	----	----	
thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010	----	----	----	----	
thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	----	----	----	----	
tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	----	----	----	----	
titanium, total	7440-32-6	E420	0.00030	mg/L	0.00170	----	----	----	----	
tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010	----	----	----	----	
uranium, total	7440-61-1	E420	0.000010	mg/L	0.000019	----	----	----	----	
vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	----	----	----	----	
zinc, total	7440-66-6	E420	0.0030	mg/L	0.0092	----	----	----	----	
zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020	----	----	----	----	

Please refer to the General Comments section for an explanation of any qualifiers detected.

CERTIFICATE OF ANALYSIS

Work Order : **YL2100486**
Client : **Sabina Gold & Silver Corporation**
Contact : Merle Keefe
Address : 375 - 555 Burrard St. Box 220, Bentall 2
 Vancouver BC Canada V7X 1M7
Telephone : 604 240 6619
Project : ----
PO : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : Q45187
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 4
Laboratory : Yellowknife - Environmental
Account Manager : Oliver Gregg
Address : 314 Old Airport Road, Unit 116
 Yellowknife NT Canada X1A 3T3
Telephone : 1 867 446 5593
Date Samples Received : 07-Jun-2021 10:20
Date Analysis Commenced : 10-Jun-2021
Issue Date : 09-Dec-2021 16:14

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Dee Lee	Analyst	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia



General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

<i>Unit</i>	<i>Description</i>
µS/cm	Microsiemens per centimetre
mg/L	milligrams per litre
pH units	pH units

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)					Client sampling date / time	04-Jun-2021 09:55	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100486-001	Result	----	----	----	----
Physical Tests										
conductivity	----	E100	2.0	µS/cm	29.9	----	----	----	----	----
pH	----	E108	0.10	pH units	6.38	----	----	----	----	----
solids, total suspended [TSS]	----	E160-H	3.0	mg/L	7.9	----	----	----	----	----
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L	0.205	----	----	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L	0.00030	----	----	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00141	----	----	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L	0.00847	----	----	----	----	----
beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	----	----	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	----	----	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L	<0.010	----	----	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.000161	----	----	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L	1.96	----	----	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L	0.000021	----	----	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	----	----	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L	0.00112	----	----	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L	0.0126	----	----	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L	0.267	----	----	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L	0.000774	----	----	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L	0.0015	----	----	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L	1.26	----	----	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L	0.0295	----	----	----	----	----
mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	----	----	----	----	----
molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.00103	----	----	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L	0.00353	----	----	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	----	----	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L	1.05	----	----	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00175	----	----	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L	<0.000050	----	----	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L	0.56	----	----	----	----	----



Analytical Results

Sub-Matrix: Water					Client sample ID	GOOSE LAKE POST	----	----	----	----
(Matrix: Water)					Client sampling date / time	04-Jun-2021 09:55	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100486-001	Result	----	----	----	----
Total Metals										
silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010		----	----	----	----
sodium, total	17341-25-2	E420	0.050	mg/L	1.04		----	----	----	----
strontium, total	7440-24-6	E420	0.00020	mg/L	0.00806		----	----	----	----
sulfur, total	7704-34-9	E420	0.50	mg/L	1.96		----	----	----	----
tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020		----	----	----	----
thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010		----	----	----	----
thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010		----	----	----	----
tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010		----	----	----	----
titanium, total	7440-32-6	E420	0.00030	mg/L	0.00576		----	----	----	----
tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010		----	----	----	----
uranium, total	7440-61-1	E420	0.000010	mg/L	0.000019		----	----	----	----
vanadium, total	7440-62-2	E420	0.00050	mg/L	0.00059		----	----	----	----
zinc, total	7440-66-6	E420	0.0030	mg/L	0.0102		----	----	----	----
zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.00020		----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

CERTIFICATE OF ANALYSIS

Work Order : **YL2100534**
Client : **Sabina Gold & Silver Corporation**
Contact : Merle Keefe
Address : 375 - 555 Burrard St. Box 220, Bentall 2
 Vancouver BC Canada V7X 1M7
Telephone : 604 240 6619
Project : ----
PO : ----
C-O-C number : ----
Sampler : ----
Site : ----
Quote number : Q45187
No. of samples received : 1
No. of samples analysed : 1

Page : 1 of 3
Laboratory : Yellowknife - Environmental
Account Manager : Oliver Gregg
Address : 314 Old Airport Road, Unit 116
 Yellowknife NT Canada X1A 3T3
Telephone : 1 867 446 5593
Date Samples Received : 11-Jun-2021 15:30
Date Analysis Commenced : 16-Jun-2021
Issue Date : 09-Dec-2021 16:14

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

<i>Signatories</i>	<i>Position</i>	<i>Laboratory Department</i>
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Paul Cushing	Team Leader - Organics	Organics, Burnaby, British Columbia



General Comments

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pH units	pH units

<: less than.

>: greater than.

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Analytical Results

Sub-Matrix: Water					Client sample ID	Goose Fuel 4	----	----	----	----
(Matrix: Water)										
					Client sampling date / time	11-Jun-2021 09:37	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2100534-001	Result	----	----	----	----
Physical Tests										
pH	----	E108	0.10	pH units	6.67		----	----	----	----
solids, total suspended [TSS]	----	E160-H	3.0	mg/L	<3.0		----	----	----	----
Total Metals										
lead, total	7439-92-1	E420	0.000050	mg/L	0.000307		----	----	----	----
Aggregate Organics										
oil & grease (gravimetric)	----	E567	5.0	mg/L	<5.0		----	----	----	----
Volatile Organic Compounds [Fuels]										
benzene	71-43-2	E611A	0.50	µg/L	<0.50		----	----	----	----
ethylbenzene	100-41-4	E611A	0.50	µg/L	1.21		----	----	----	----
toluene	108-88-3	E611A	0.50	µg/L	<0.50		----	----	----	----
Volatile Organic Compounds Surrogates										
bromofluorobenzene, 4-	460-00-4	E611A	1.0	%	93.5		----	----	----	----
difluorobenzene, 1,4-	540-36-3	E611A	1.0	%	125		----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.