

NI 43-101 Technical Report for the Seabee Gold Operation, Saskatchewan, Canada

Report Prepared for
SSR Mining Inc./SGO Mining Inc.



Report Prepared by



SRK Consulting (Canada) Inc.
5CS010.001
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SSR Mining Inc. and SGO Mining Inc.

Suite 800, Four Bentall Centre
1055 Dunsmuir Street
Vancouver, British Columbia, V7X 1G4, Canada
Website: www.ssrmining.com
Tel: +1 (604) 689-3846

SRK Consulting (Canada) Inc.

Suite 101, 1984 Regent St. South
Sudbury, Ontario, P3E 5S1, Canada
E-mail: sudbury@srk.com
Website: www.srk.com
Tel: +1 705 682 3270

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Signature date: October 20, 2017

Qualified Persons:

["Original signed"]

Michael Selby, PEng
Principal Consultant (Mining)
SRK Consulting (Canada) Inc.
APEGS#30781

["Original signed"]

Dominic Chartier, PGeo
Senior Consultant (Geology)
SRK Consulting (Canada) Inc.
APEGS#39656

["Original signed"]

Mark Liskowich, PGeo
Principal Consultant (Environment)
SRK Consulting (Canada) Inc.
APEGS#10005

["Original signed"]

Jeffrey Kulas, PGeo
Manager Geology, Mining at Seabee Gold Operation
SSR Mining Inc.
APEGS#12374

Reviewed by:

["Original signed"]

Gary Poxleitner, PEng
Principal Consultant (Mining)
SRK Consulting (Canada) Inc.
PEO#100059860

["Original signed"]

Glen Cole, PGeo
Principal Consultant (Resource Geology)
SRK Consulting (Canada) Inc.
APGO#1416

Contributing Authors:

Trevor Podaima, PEng

G. Ross MacFarlane, PEng

Caitlyn Adams, GIT

Cover: Seabee mine site, Seabee Gold Operation.

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This disclosure includes certain terms or performance measures commonly used in the mining industry that are not defined under International Financial Reporting Standards (IFRS), including cash costs and all-in sustaining costs per payable ounce of gold sold. Non-GAAP measures do not have any standardized meaning prescribed under IFRS and, therefore, they may not be comparable to similar measures employed by other companies. The data presented is intended to provide additional information and should not be considered in isolation or as a substitute for measures of performance prepared in accordance with IFRS. Readers should also refer to SSR Mining’s management’s discussion and analysis, available under its corporate profile at www.sedar.com or on its website at www.ssrmining.com, under the heading “Non-GAAP and Additional GAAP Financial Measures” for a more detailed discussion of how SSR Mining calculates such measures.

1 Executive Summary

Introduction

The Seabee Gold Operation is an underground gold mining and milling operation, located in Saskatchewan, Canada, approximately 125 kilometres northeast of the town of La Ronge. SSR Mining Inc. (SSR Mining) holds a 100 percent interest in the property through its wholly-owned subsidiary, SGO Mining Inc. (formerly Claude Resources Inc. (Claude Resources)) (SGO Mining).

SSR Mining, formerly Silver Standard Resources Inc., is a Vancouver-based mining company focused on the operation, development, exploration and acquisition of precious metal projects. It is listed under the ticker symbol SSRM on the NASDAQ Capital Markets and the Toronto Stock Exchange. SSR Mining is a precious metals producer with three operations, including the Seabee Gold Operation, the Marigold gold mine in Nevada, U.S., and the 75 percent owned and operated Puna Operations joint venture in Jujuy Province, Argentina. Puna Operations consists of the Pirquitas operation and the Chinchillas project.

In May 2017, SSR Mining commissioned SRK Consulting (Canada) Inc. (SRK) to visit the property to audit and prepare a NI 43-101 technical report in support of its Mineral Resource models, Mineral Reserve estimate, and preliminary economic assessment (PEA) that considers an expansion scenario and includes Inferred Mineral Resources in respect of such proposed expansion scenario. The services were rendered between May 2017 and August 2017 leading to the preparation of the Mineral Resource Statement and Mineral Reserve Statement reported herein and the PEA summarized herein that were disclosed publicly by SSR Mining in a news release on September 7, 2017.

This NI 43-101 technical report (Report) provides a summary of the current Seabee Gold Operation, including the current Mineral Resources and Mineral Reserves estimates for such operation, as at the effective date of this Report. Section 24 provides a proposed PEA expansion scenario currently being considered by SSR Mining. Unless specified otherwise, disclosure outside of Section 24 of this Report describes the Seabee Gold Operation as presently conducted and not as contemplated under the PEA.

Property Description and Ownership

The Seabee Gold Operation is located at the north end of Laonil Lake, approximately 125 kilometres northeast of the town of La Ronge, Saskatchewan, Canada. The property hosts two operating mines – the Seabee mine and the Santoy mine – with the Santoy mine situated approximately 14 kilometres to the east of the Seabee mine.

A central milling facility is located on the property near the Seabee mine. The centre of the property is located at approximately 55.7 degrees latitude north and 103.5 degrees longitude west.

The Seabee Gold Operation is comprised of six mineral leases and 40 mineral claims that cover an area of approximately 23,700 hectares. SSR Mining holds a 100 percent interest in the property through its wholly-owned subsidiary, SGO Mining.

Geology and Mineralization

The Seabee Gold Operation is located within the northern portion of the Pine Lake greenstone belt. The belt has a strike length in excess of 50 kilometres and comprises a variety of geochemically distinct tholeiitic mafic volcanic rocks formed in juvenile island arc settings, along with contemporaneous mafic intrusive rocks, volcanoclastics, sediments and felsic intrusions of varying age. Metamorphic grade across the Pine Lake greenstone belt ranges from upper greenschist to upper amphibolite, with the Seabee Gold Operation hosted in the latter. The belt has been complexly folded by at least four major phases of deformation that are observed

across the Seabee Gold Operation site and elsewhere in the Glennie domain of the Proterozoic Trans-Hudson Orogen.

The Seabee Gold Operation can be subdivided into three main geological domains:

- The Seabee mine area is hosted within a coarsely layered mafic intrusion dominated by gabbro in the mine sequence.
- The Santoy mine area is hosted within a sequence of mafic volcano-sedimentary rocks separated by generally north-south trending thrust faults.
- The Porky deposit area is a mineralized trend hosted along a 12-kilometre long openly folded unconformity, separating arenaceous sedimentary rocks of the Rae Lake synform to the north from mafic volcanic rocks of the Seabee mine area to the south.

Gold mineralization at the Seabee mine is hosted within an extensive network of sub-parallel shear structures, which crosscut the Laonil Lake intrusive complex. Vein mineralogy is dominantly quartz with pyrite, pyrrhotite and chalcopyrite, and accessory tourmaline and carbonate. Gold occurs primarily as free, finely disseminated flakes and films replacing pyrite or at sulphide boundaries. Higher grade gold values are most often associated within sulphide rich zones or at vein junctions. Silicification is the most common alteration type observed at the Seabee mine.

Gold mineralization at the Santoy mine is hosted within calc-silicate altered shear structures with diopside-albite +/- titanite-bearing quartz veins, and occurs in gold-sulphide-chlorite-quartz veins in the shear zones, near or in the granodiorite and granite sills. Diopside-albite calc-silicate alteration facies are the main host to gold mineralization in the Santoy 8A and Santoy Gap 9A, 9B and 9C zones. The Santoy Gap deposit occurs along a major inflection of the Santoy shear zone between the Santoy 7 and Santoy 8 deposits.

At the Porky deposit, the brittle-ductile lode gold system is hosted along a thick corridor of calc-silicate altered mafic volcanics and arenaceous sedimentary rocks that straddle a major unconformity along the southern margin of the Rae Lake synform. Both the Porky Main and Porky West deposits are characterized by the same calc-silicate alteration package; however, the unconformity and arenites host most of the auriferous quartz veins at the Porky West deposit.

Exploration Status

The Laonil Lake region has been explored since the 1940s, with the first gold discovery made by prospectors in 1947. Since that time, exploration at the Seabee Gold Operation has comprised of surficial geochemical sampling, airborne and ground geophysical surveys and extensive drilling. To date, drilling on the Seabee Gold Operation property by SSR Mining and previous operators includes 2,134 surface boreholes totaling 431,849 metres and 5,208 underground boreholes totaling 959,474 metres. Exploration surface drilling and infill surface and underground drilling completed by SSR Mining in 2017 has been executed in the Carruthers, Herb Lake, Porky Main, Porky West, Seabee, and Santoy areas, where a total of 55,690 metres have been drilled from 130 boreholes.

The objective of ongoing exploration conducted by SSR Mining is to delineate, increase and upgrade Mineral Resources. Underground drilling in the first quarter of 2017 focused on the Santoy Gap, Santoy 8A vein and the Santoy Gap Hanging Wall. Drilling at Santoy Gap aims to increase or upgrade Inferred Mineral Resources, and drilling at Santoy 8 is focused on upgrading existing Mineral Resources at the Santoy 8A vein. At the Santoy Gap Hanging Wall, surface drilling is designed to confirm the potential of the new target. Further drilling at all three targets will determine the continuity of the gold mineralization.

At the Seabee Gold Operation, the 2017 surface and underground infill diamond drilling program plan is to complete up to 60,000 metres of drilling to upgrade existing Mineral Resources and to discover additional Inferred Mineral Resources at Santoy Gap, Santoy 8 and the Seabee mine. At the Seabee mine, approximately 30 percent of underground drilling is allocated for testing of targets to maximize Mineral Resource potential at the mine as SSR Mining develops its long-term strategy. A surface and underground infill diamond drilling program of 300,000 metres is proposed by SSR Mining between 2018 and 2022. This program is focused on

upgrading the Inferred Mineral Resource and other near mine targets within the infrastructure corridor between the Seabee mine and Santoy mine.

Surface exploration drilling in the first quarter of 2017 focused on the Porky Main, Carr and Herb deposits. Encouraging results have prompted additional exploration drilling to define additional Inferred Mineral Resources. Surface drilling at the Seabee Gold Operation is expected to complete approximately 28,500 metres on up to nine regional targets in 2017. Continued surface exploration is planned for the Seabee and Santoy deposits, with more aggressive 20,000 metre programs scheduled for 2018 and 2019, and programs of 12,000 metres scheduled for 2020 and 2021.

In addition, 5,000 soil samples are planned to be collected in 2017 to compliment the 2016 geochemical soil sampling program near Santoy Lake. This exploration program is scheduled to be followed-up with prospecting and trenching to delineate drill targets for 2018.

A total of C\$2.9 million is budgeted for the 2017 Seabee and Santoy exploration programs.

Development and Operations

The life of mine plan of the Mineral Reserve at the Seabee Gold Operation, commencing January 1, 2017, includes 1.371 million tonnes at an average grade of 8.19 grams of gold per tonne (g/t gold). A total of 361,000 ounces of gold will be delivered to the mill.

There are currently two operating mines as part of the Seabee Gold Operation, Santoy mine and Seabee mine. Mining will take place at both the Santoy mine and Seabee mine at an average combined total production rate of 920 tonnes per day. Continuous production from the Seabee mine is scheduled to be completed in 2018, with some lower value remnant mining planned to coincide with the closure of the entire Seabee Gold Operation in 2021. Thus, the Santoy mine will provide most of the production included in the Mineral Reserve estimate. To achieve the Mineral Reserve production plan, 14,300 metres of capital and operating development is required.

Access underground at the Santoy mine is provided from surface at the Santoy portal via a main ramp. Sublevels are typically spaced 17 metres vertically. At the Santoy mine, stoping will take place between 7 Level and 52 Level. Stopes are mined and will continue to be mined via a longhole mining method. The planned stopes range in width from 2.2 up to 26.0 metres and can be up to 40.0 metres in length. Once mined, where sequencing and access requirement dictate, stopes are backfilled with waste rock or cemented waste rock. The mining sequence will continue to proceed in several longitudinally retreating, bottom-up advancing mining fronts. Current practice for material handling will remain with ore being truck hauled to surface and then hauled 14.0 kilometres to the mill located at the Seabee mine.

At the Seabee mine, mining will occur on 1300 Level. Access from surface from the Seabee portal will be provided via a main ramp to the deepest levels. Alimak mining methods will be used to recover the remaining planned stopes. The Seabee shaft will continue to be used to hoist the ore to surface.

Material has been processed for 25 years in the mill constructed immediately adjacent to the Seabee shaft. The operation was initially developed and operated on diesel power and later connected to Saskatchewan grid power in 1992. The initial capacity of the mill was 500 tonnes per day, which was later expanded to a nameplate capacity of 1,000 tonnes per day, with the addition of a third grinding mill in 2005. The mill flowsheet is a conventional crushing and grinding circuit employing gravity concentration and cyanide leaching and carbon-in-pulp for recovery and production of doré gold on site. Currently, an addition to the gravity recovery circuit is being installed that will increase the gravity gold recovery and reduce the limitations of the main cyanide leach circuit.

The major infrastructure at the Seabee Gold Operation site includes roads and an airstrip, powerhouse and electrical distribution system, mill buildings and related services facilities, Seabee shaft and headframe, portals and ventilation raises, fuel storage, explosive storage, water supply and distribution, water management ponds and water treatment plant, tailings management facilities, administrative buildings, and camp accommodation.

There are currently two tailings management facilities that are being used by the mill: the East Lake tailings management facility (East Lake TMF) and the Triangle Lake tailings management facility (Triangle Lake TMF). Tailings deposition alternates between the two tailings management facilities where winter deposition occurs in the Triangle Lake TMF and summer deposition is in the East Lake TMF. The remaining storage capacities of both facilities, based on the planned production rates, will potentially reach maximum capacity in early 2021. To ensure that water treatment volumes are attained, a new water treatment plant at East Lake TMF has been constructed in 2017.

Mineral Resource and Mineral Reserve Estimates

The Canadian Institute of Mining, Metallurgy and Petroleum (CIM) *Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) defines a Mineral Resource as follows:

“A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”

The “reasonable prospects for eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade, taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SSR Mining considers that the majority of the Seabee Gold Operation is amenable for underground extraction.

The block model and polygonal quantities and grade estimates were also reviewed to determine the portions of the Seabee mine, Santoy mine, and Porky deposits having “reasonable prospects for eventual economic extraction” from an underground mine, based a cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine assuming a gold price of US\$1,400 per ounce, and metallurgical gold recovery of 96.5 percent. The reporting parameters were selected based on production experience at the Seabee Gold Operation.

SSR Mining considers that the blocks located within the classification domains and the polygonal estimates show “reasonable prospects for eventual economic extraction” and can be reported as a Mineral Resource. The Mineral Resource Statement for the Seabee Gold Operation is presented in Table i.

The Mineral Reserve estimate was completed by the SSR Mining technical department on site at the Seabee Gold Operation. SRK reviewed the assumptions, parameters, and methods used to prepare the Mineral Reserve Statement and is of the opinion that the Mineral Reserve is estimated in conformity with *CIM Mineral Resource and Mineral Reserves Estimation Best Practices Guidelines* (November 2003) and is classified according to *CIM Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) guidelines.

The Mineral Reserve Statement is reported in Table ii and is in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* (NI 43-101). The reference point at which the Mineral Reserve is identified is where ore is delivered to the processing plant (i.e. “mill feed”). SRK is unaware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that may materially affect the Mineral Reserve estimate. However, the Mineral Reserve may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource and Mineral Reserve estimates. The Mineral Reserve may also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. The effective date of the Mineral Reserve Statement is December 31, 2016.

Table i: Mineral Resource Statement, Seabee Gold Operation, Saskatchewan, SSR Mining Inc., December 31, 2016

Classification/Area	Quantity ('000 t)	Grade Gold (g/t)	Contained Gold ('000 oz)
Measured			
Seabee	175	6.76	38
Santoy Gap	598	7.90	152
Santoy 8	33	9.29	10
Porky West	—	—	—
Total Measured	807	7.71	200
Indicated			
Seabee	111	8.39	30
Santoy Gap	688	8.40	186
Santoy 8	367	9.12	108
Porky West	101	3.57	12
Total Indicated	1,267	8.22	335
Total M&I	2,074	8.02	535
Inferred			
Seabee	356	8.62	99
Santoy Gap	510	9.23	151
Santoy 8	1,454	7.14	334
Porky West	175	5.48	31
Total Inferred	2,495	7.66	615

Notes: Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. Mineral Resources are reported inclusive of Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources are reported within classification domains inclusive of in-situ dilution at a diluted cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine assuming an underground extraction scenario, a gold price of US\$1,400/oz, C\$:US\$ exchange rate of 1.25; and metallurgical recovery of 96.5%. Block modelling techniques were used for Mineral Resource estimates for the Santoy mine and the majority of the Seabee mine. Polygonal techniques were used in areas of historical mining at the Seabee mine at Porky West.

Table ii: Mineral Reserve Statement, Seabee Gold Operation, Saskatchewan, Canada SRK Consulting (Canada) Inc., December 31, 2016

Category	Quantity ('000 t)	Gold Grade (g/t)	Contained Gold ('000 oz)
Proven			
Santoy Mine	380	7.41	90
Seabee Mine	82	6.98	18
Broken (Underground and Stockpile)	56	4.04	7
Total Proven	518	6.97	116
Probable			
Santoy Mine	805	9.03	234
Seabee Mine	48	7.37	11
Total Probable	854	8.93	245
Total Proven and Probable	1,371	8.19	361

Notes: Mineral Reserves are included in Mineral Resources. All figures have been rounded to reflect the relative accuracy of the estimate. Mineral Reserves are based on a cut-off value of 4.92 g/t gold for the Seabee mine and 3.65 g/t gold for the Santoy mine assuming: a gold price of US\$1,250/oz; a C\$:US\$ exchange rate of 1.25; milling recoveries of 96.5%; royalty of 3.0%; and operating cost of C\$231/t at the Seabee mine and C\$172/t at the Santoy mine. Mineral Reserves are stated at a mill feed reference point and include for diluting materials and mining losses.

Environmental and Social

SSR Mining has successfully completed three environmental assessments for the Seabee Gold Operation to date. The site is regulated by both the Saskatchewan Ministry of Environment and Environment and Climate Change Canada. In accordance with provincial environmental legislation and regulations, the operation must adhere to the terms and conditions of an *Approval to Operate a Pollutant Control Facility* (Approval to Operate). The Seabee Gold Operation is in compliance with all the terms and conditions of its current Approval to Operate number PO16-002, issued in January 2016 with an expiry date of September 2019. SSR Mining is responsible to submit an application to renew this Approval to Operate a minimum of 90 days prior to the expiry date.

The dominant environmental liability at the Seabee Gold Operation is the management of the mill tailings and associated tailings effluent. Appropriate infrastructure and operational plans are in place to reduce operational and closure risks associated with these liabilities to acceptable levels.

SSR Mining has initiated a thorough stakeholder engagement plan designed to strengthen its relationship with communities impacted by the Seabee Gold Operation, and the existing social license to continue operations of the facility. No significant public concern with the Seabee Gold Operation was expressed during stakeholder engagement meetings held in 2016 and 2017.

There are no known environmental concerns at the Seabee Gold Operation that cannot be successfully mitigated through the implementation of the various approved management plans that have been developed based on accepted scientific and engineering practices.

In accordance with provincial regulations, SSR Mining has submitted an updated decommissioning and reclamation plan and cost estimate every five years, since 1996. Following initial regulatory review and subsequent edits by SSR Mining, the 2016 revision to the preliminary decommissioning and reclamation plan is under final review by the Ministry of Environment. The total cost to implement the closure plan through the use of a third party contractor is C\$7.2 million. This cost estimate incorporates costs to cover release of the property, following the successful implementation of the closure plan, back to the province by way of Saskatchewan's *Institutional Control Program*.

PEA Summary

The PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized.

Based on SSR Mining's operating experience and investment in exploration to increase Mineral Resources at the Seabee Gold Operation since its acquisition in May 2016, the PEA contemplates the technical and investment requirements for and demonstrates the economics of a potential expansion to a sustained mining and milling rate of 1,050 tonnes per day. This results in increased gold production and decreased cash costs, over a seven-year operating period. Developing and evaluating this production plan assists SSR Mining in identifying potential strategic, long term direction for Seabee Gold Operation.

By including the Inferred Mineral Resource in the PEA production plan, a production rate of 1,050 tonnes per day can be sustained until 2024. Overall, the life of mine plan, commencing July 1, 2017, includes 2.654 million tonnes at an average grade of 8.30 g/t gold (including dilution). The total gold delivered to the mill under the PEA would be 708,000 ounces.

Mining would occur at both the Seabee mine and Santoy mine in 2017 and 2018. After 2018, the Santoy mine would be the only source of feed until 2024, when the known Mineral Resource is exhausted and some lower value remnant mining is completed back at the Seabee mine. The production rate would ramp up gradually from 920 tonnes per day in 2017 to 1,050 tonnes per day in 2019 as additional mining fronts are established at the Santoy mine. To achieve the production plan under the PEA, 28,900 metres of capital and operating development would be required.

At the Santoy mine, the footprint expands from that of the Mineral Reserve. Access underground from surface is still maintained via the Santoy portal and main ramp. Stoping would take place from 2 Level to as deep as 74 Level. The stopes would be mined via longhole mining methods. Mining at the Seabee mine is identical to that included in the current production plan for the Seabee Gold Operation.

Additional site infrastructure improvements are included in the PEA for the camp accommodation, the diesel storage, the Santoy mine electrical distribution, and a tailings management facility expansion.

The capital costs required to achieve the PEA life of mine are summarized in Table iii.

The operating expense estimated for the PEA is summarized in Table iv. On inclusion of royalties and treatment and refining charges, and sustaining capital costs, the operating cost translates into a cash cost of US\$548 per payable ounce of gold and an all-in sustaining cost (AISC) of US\$682 per payable ounce of gold.

Cash costs and AISC per payable ounce of gold sold are non-GAAP financial measures. Please see "Cautionary Note Regarding Forward-Looking Statements" in this Report.

Table iii: Summary of PEA Capital Costs

Cost Component	Value US\$ MM
Infrastructure capital	50.2
Capital development	23.4
Capitalized exploration	15.9
Total Capital Cost	89.6

Note: Sum of individual values may not match total due to rounding.

Table iv: Summary of PEA Operating Costs

Cost Component	Value US\$/t milled
Mining	58
Processing	20
General and Administrative	52
Operating Costs	130

The estimated post-tax net present value of the Seabee Gold Operation PEA using a discount rate of 5 percent, generated on July 1, 2017 is US\$292.0 million. The corresponding pre-tax net present value is US\$363.5 million. A summary of key operating and financial estimates is provided in Table v.

Table v: Key PEA Operating and Financial Estimates

Item	Unit of Measure	Value
Tonnes milled	'000 tonnes	2,654
Milled grade	g/t	8.30
Mine plan	years	7
Daily mill production	tonnes/day	1,050
Gold milled	'000 oz	708
Gold recovery	%	96.5
Gold produced	'000 oz	683
Average annual gold production (2018-2023)	'000 oz	100
Gold price	US\$/oz	1,300
Exchange rate (2019-2026)	C\$:US\$	1.25
Cash costs	US\$/payable ounce	548
Capital costs	US\$ MM	89.6
AISC	US\$/payable ounce	682
Cumulative post-tax cash flow	US\$ MM	346.7
NPV5% (pre-tax)	US\$ MM	363.5
NPV5% (post-tax)	US\$ MM	292.0

Conclusion and Recommendations

In the opinion of SSR Mining and SRK, the Mineral Resource and Mineral Reserve estimates and the PEA summarized herein have received appropriate geological and engineering consideration to be included in this Report in accordance with NI 43-101. Thus, Mineral Resources and Mineral Reserves can be declared and the PEA can be used as a guide to consider an expansion case for the Seabee Gold Operation.

SRK is not aware of any significant risks and uncertainties that could be expected to affect the reliability or confidence in the information discussed herein.

The current Mineral Reserve life of mine plan extends to the first quarter of 2021. The average production rate is planned to achieve 920 tonnes per day. The Mineral Reserve includes 1.371 million tonnes at an average grade 8.19 g/t gold, for a total of 361,000 contained gold ounces.

In comparison, under the PEA, which includes a portion of the Inferred Mineral Resource, 2.654 million tonnes at an average grade of 8.30 g/t gold are considered, for a total of 708,000 contained gold ounces. At the peak production rate of 1,050 tonnes per day, the PEA estimates a seven-year operating period, concluding in 2024.

SSR Mining has proposed a five-year exploration program at the Seabee Gold Operation that includes 80,000 metres of surface diamond drilling at an estimated cost of US\$11 million. This program intends to test various greenfield targets such as the Carr trend and brownfield targets such as those near Munro Lake that also exhibit stratigraphy, alteration, and mineralization similar to the Santoy deposits.

In addition, SSR Mining has proposed an additional infill surface and underground drilling program of 300,000 metres between 2018 and 2022 at an estimated cost of C\$16.2 million. The surface drilling will focus on targets between the Santoy mine and Seabee mine that are in proximity to the haulage road and have either limited, but notable historic drilling or surface showings with strong soil sample anomalies; the concept being that production from these targets, if proven, could be achieved within a three to five-year timeline. A total of 210,000 metres included in the underground drilling program is intended to improve the confidence in the Inferred Mineral Resource included in the PEA production profile. Based on the results of the audit of the Mineral Resource and Mineral Reserve estimates and the PEA, SRK recommends executing the exploration and infill diamond drilling programs proposed by SSR Mining to potentially expand and improve the level of confidence in the Mineral Resource estimate. The cost of the underground drilling program has been included

in the PEA economic analysis. Structural geology investigations on the property should be ongoing as new drilling data is generated and these should be integrated into regular Mineral Resource model updates.

As the geological understanding of the Seabee Gold Operation improves, SRK recommends refining the PEA at least annually to determine modifications to the production plan and provide guidance for further exploration and mining focus. This is current practice for the technical department at the Seabee Gold Operation for the current Mineral Reserve life of mine plan and is covered within normal operating costs.

Regional exploration activities should continue, particularly evaluating the southern extension of the Santoy shearzone toward the adjacent Fisher property, which SRK considers having sufficient merit to justify additional exploration expenditures.

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2 Introduction and Terms of Reference

The Seabee Gold Operation is an underground gold mining and milling operation, located in Saskatchewan, Canada, approximately 125 kilometres northeast of the town of La Ronge. SSR Mining Inc. (SSR Mining) holds a 100 percent interest in the property through its wholly-owned subsidiary, SGO Mining Inc. (formerly Claude Resources Inc. (Claude Resources)) (SGO Mining).

SSR Mining, formerly Silver Standard Resources Inc., is a Vancouver-based mining company focused on the operation, development, exploration and acquisition of precious metal projects. It is listed under the ticker symbol SSRM on the NASDAQ Capital Markets and the Toronto Stock Exchange. SSR Mining is a precious metals producer with three operations, including the Seabee Gold Operation, the Marigold gold mine in Nevada, U.S., and the 75% owned and operated Puna Operations joint venture in Jujuy Province, Argentina. Puna Operations consists of the Piriquitas operation and the Chinchillas project.

In May 2017, SSR Mining commissioned SRK Consulting (Canada) Inc. (SRK) to visit the property to audit its Mineral Resource models, Mineral Reserve estimate, and preliminary economic assessment (PEA) that considers an expansion scenario and includes Inferred Mineral Resource in respect of such proposed expansion scenario. The services were rendered between May 2017 and August 2017 leading to the preparation of the Mineral Resource Statement and Mineral Reserve Statement reported herein and the PEA summarized herein that were disclosed publicly by SSR Mining in a news release on September 7, 2017.

The last NI 43-101 technical report for the Seabee Gold Operation was generated by Claude Resources and filed on December 23, 2013, documenting Mineral Resources and Mineral Reserves as of December 31, 2012. This NI 43-101 technical report (Report) documents the Mineral Resource Statement, Mineral Reserve Statement and PEA of an expansion scenario for the Seabee Gold Operation as of December 31, 2016, prepared by SSR Mining and audited by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101–*Standards of Disclosure for Mineral Projects* (NI 43-101) and Form 43-101F1. The Mineral Resource Statement and the Mineral Reserve Statement reported herein were prepared in conformity with generally accepted Canadian Institute of Mining, Metallurgy and Petroleum (CIM) *Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines*.

This Report provides a summary of the current Seabee Gold Operation, including the current Mineral Resource and Mineral Reserve estimates for such operation, as at the effective date of this Report. In addition, this Report summarizes, in Section 24, a PEA of an expansion scenario being considered by SSR Mining. Unless specified otherwise, disclosure outside of Section 24 of this Report describes the Seabee Gold Operation as presently conducted and not as contemplated under the PEA.

2.1 Scope of Work

The scope of work, as defined in a letter of engagement, executed on May 18, 2017 between SSR Mining and SRK, includes: (1) the review and audit of the Mineral Resource models for the gold mineralization delineated by drilling on the Seabee Gold Operation; (2) the review and audit of the Mineral Reserve estimate; (3) the review and audit of the PEA and the supporting aspects of the associated production plans; and, (4) the preparation of an independent technical report in

compliance with NI 43-101 and Form 43-101F1 guidelines. This work typically involves the assessment of the following aspects of a project:

- Topography, landscape, access
- Regional and local geology
- Exploration history
- Audit of exploration work
- Geological modelling
- Metallurgical work
- Mineral Resource estimation and validation
- Preparation of a Mineral Resource Statement
- Preparation of a Mineral Reserve Statement
- Mine design and schedule
- Rock geotechnical assessment
- Mineral processing
- Tailings management facility assessment
- Environment and social impact
- Cost estimation
- Recommendations for additional work

2.2 Work Program

The Mineral Resource Statement, Mineral Reserve Statement, and PEA reported herein represent a collaborative effort between SSR Mining and SRK personnel. The exploration database was compiled and maintained by SSR Mining, and was audited by SRK. The geological model and outlines for the gold mineralization were constructed by SSR Mining, and were audited by SRK. In the opinion of SRK, the geological model is a reasonable representation of the distribution of the targeted mineralization at the current level of sampling. The geostatistical analysis, variography and grade models were completed by SSR Mining, and audited by SRK. The life of mine plans supporting the Mineral Reserve estimate and PEA were generated by SSR Mining, and audited and modified where appropriate by SRK. The Mineral Resource Statement and Mineral Reserve Statement as of December 31, 2016 reported herein with minor modifications were disclosed publicly by SSR Mining within their fourth quarter and year-end 2016 results news release dated February 23, 2017.

The Porky Main deposit included in the Mineral Resource Statement disclosed in SSR Mining's news release dated February 23, 2017 was estimated using polygonal methods by Claude Resources in 2005. However, SSR Mining has not been able to verify the results of this polygonal estimate, therefore Porky Main is not included in the Mineral Resource Statement contained herein, but may be included in the future pending additional drilling and modelling.

This Report was assembled in the SRK Sudbury, Toronto, and Saskatoon offices during the months of May to October 2017.

2.3 Basis of NI 43-101 Technical Report

This Report is based on information collected by SRK during a site visit performed between May 29 and 31, 2017 and on additional information provided by SSR Mining throughout the course of SRK's analysis. SRK conducted certain verifications to ensure the reliability of data collected by SSR Mining and has no reason to doubt the reliability of the information provided. Other

information was obtained from the public domain. This Report is based on the following sources of information:

- Discussions with SSR Mining personnel.
- Inspection of the Seabee Gold Operation area, including outcrop, drill core, and underground exposures.
- Review of exploration data collected by SSR Mining.
- Review of actual operations data provided by SSR Mining.
- Additional information from public domain sources.

The Mineral Resource Statement disclosed publicly in the news release dated February 23, 2017 was prepared by SSR Mining under the supervision of Jeffrey Kulas, PGeo (APEGs#12374), a Qualified Person and Manager Geology, Mining Operations at the Seabee Gold Operation. The Mineral Reserve Statement disclosed publicly in the news release dated February 23, 2017 was prepared by SSR Mining under the supervision of Kevin Fitzpatrick, PEng (APEGs#26974), a Qualified Person and Engineering Supervisor at the Seabee Gold Operation.

2.4 Qualifications of SRK and NI 43-101 Technical Report Team

The SRK Group comprises of more than 1,400 professionals, offering expertise in a wide range of resource engineering disciplines. The independence of the SRK Group is ensured by the fact that it holds no equity in any project it investigates and that its ownership rests solely with its staff. These facts permit SRK to provide its clients with conflict-free and objective recommendations. SRK has a proven track record in undertaking independent assessments of Mineral Resource and Mineral Reserve estimates, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies, and financial institutions worldwide. Through its work with a large number of major international mining companies, the SRK Group has established a reputation for providing valuable consultancy services to the global mining industry.

The Mineral Resource and Mineral Reserve estimates and PEA audit work, and the compilation of this Report were completed by Mr. Michael Selby, PEng (APEGs#30781), Mr. Dominic Chartier, PGeo (APEGs#39656), Mr. Mark Liskowich, PGeo (APEGs#10005) and Mr. Jeffrey Kulas, PGeo (APEGs#12374). By virtue of their education, membership to a recognized professional association and relevant work experience, Messrs. Selby, Chartier, Liskowich, and Kulas are Qualified Persons as this term is defined by NI 43-101. Additional contributions were provided by Ms. Caitlyn Adams, GIT (APGO#10520), Mr. Ross MacFarlane, PEng (PEO#28062503), and Mr. Trevor Podaima, PEng (APGO#20380).

Mr. Michael Selby, PEng is a Principal Consultant (Mining) with SRK and has been practicing in the field of underground mining continuously since 2001 in operating, engineering, and consultancy roles. He completed the audit of the Mineral Reserve estimate and PEA summarized within this Report. He is the Qualified Person for Sections 1, 2, 3, 13, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26, and 27. Mr. Selby visited the Seabee Gold Operation between May 29 and 31, 2017.

Mr. Dominic Chartier, PGeo is a Senior Consultant (Geology) with SRK and has been practicing his profession continuously in field exploration and consultancy since 2002. He completed the audit of the Mineral Resource estimate and supervised the compilation of the historical, geological, and exploration information in this Report. He is the Qualified Person for Sections 4.1, 4.2, 5, 6, 7, 8, 9, 10, 11, 12, 14.1, 14.7, and 23. Mr. Chartier visited the Seabee Gold Operation between May 29 and 31, 2017.

Mr. Mark Liskowich, PGeo is a Principal Consultant (Environmental Management) with SRK. He has been practicing his profession within the mineral exploration and mining industry continuously since 1989. His expertise is in the environmental, permitting, and social management of mineral exploration and mining projects. He is the Qualified Person for Sections 4.3, 4.4, and 20. Mr. Liskowich has visited the Seabee Gold Operation on numerous occasions since 1992 and most recently in March 2016.

Mr. Jeffrey Kulas, PGeo, is Manager Geology, Mining Operations at the Seabee Gold Operation with SSR Mining. The Mineral Resource estimation work was completed by the mine geology department under the supervision of Mr. Kulas. He is the Qualified Person for Sections 14.1 to 14.6. Mr. Kulas has been employed at the Seabee Gold Operation since October 2000.

Ms. Caitlyn Adams, GIT is a Staff Consultant (Geology) with SRK. She has been involved in field exploration and consultancy since 2012. She assisted with compiling the historical, geological, and exploration information in this Report. Ms. Adams has not visited the Seabee Gold Operation.

Mr. G. Ross MacFarlane, PEng is an Associate (Metallurgist) with SRK and has been involved in mining and metallurgy since 1973. He assisted with the review and summary of the mineral processing aspects of this Report. He visited the Seabee Gold Operation in 2010 and relied on the status update provided by SSR Mining and observed by Mr. Selby during his site visit.

Mr. Trevor Podaima, PEng is a Senior Consultant (Geotechnical Engineering) with SRK. He has been practicing continuously in his field of tailings management facility and water management consultancy since 2004. He assisted with the review and summary of the site infrastructure portion of this Report. He has visited the Seabee Gold Operation on numerous occasions since 2008, and most recently on August 8 to 10, 2017.

Mr. Glen Cole, PGeo (APGO#1416), is a Principal Consultant (Resource Geology) with SRK. He reviewed a draft of this Report prior to delivery to SSR Mining as per SRK internal quality management procedures. Although Mr. Cole has not personally visited the Seabee Gold Operation, he has contributed to previous Mineral Resource models and audits of Mineral Resource and Mineral Reserve estimates at the Seabee Gold Operation.

Mr. Gary Poxleitner, PEng (PEO#100059860), is a Principal Consultant (Mining) with SRK. He reviewed the draft mining, site infrastructure, and cost estimation portions of this Report prior to their delivery to SSR Mining as per SRK internal quality management procedures. Mr. Poxleitner has not visited the Seabee Gold Operation.

2.5 Site Visit

In accordance with NI 43-101 guidelines, Mr. Dominic Chartier and Mr. Michael Selby visited the Seabee Gold Operation on May 29 to 31, 2017 accompanied by Ms. Vicky Bleppony, Mr. Cameron Chapman, Mr. Kevin Fitzgerald, Mr. Jeffery Kulas, and Mr. Kyle MacLintock of SSR Mining.

The purpose of the site visit was to review the digitalization of the exploration database and validation procedures, review exploration procedures, define geological modelling procedures, examine drill core, review mine design and scheduling processes, examine underground workplaces, gain an understating of the status of the mill and other site infrastructure, interview project personnel, and collect all relevant information for the audit of the Mineral Resource and Mineral Reserve estimates and PEA, and the compilation of this Report.

SRK was given full access to relevant data and conducted interviews with SSR Mining personnel to obtain information on the past exploration work, and to understand procedures used to collect, record, store and analyze historical and current exploration data.

2.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by SSR Mining personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project. Mr. Bruce Butcher, Director, Mine Planning and Ms. Victoria Blepony, Senior Planning Engineer, Technical Services, for SSR Mining provided invaluable guidance and direction to the project.

2.7 Declaration

SRK's opinion contained herein and effective **December 31, 2016** is based on information collected by SRK throughout the course of SRK's investigations. The information in turn reflects various technical and economic conditions at the time of writing this Report. Given the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

This Report may include technical information that requires subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, SRK does not consider them to be material.

SRK is not an insider, associate or an affiliate of SSR Mining, and neither SRK nor any affiliate has acted as advisor to SSR Mining, its subsidiaries or its affiliates in connection with this project. The results of the technical review by SRK are not dependent on any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings.

3 Reliance on Other Experts

SRK has not performed an independent verification of land title and tenure information as summarized in Section 4 of this Report. SRK did not verify the legality of any underlying agreement(s) that may exist concerning the permits or other agreement(s) between third parties. For certain matters related to mineral tenure, including for example, the legal status of the rights disclosed in Section 4.1 and the recorded notices relating to Section 4.2, SRK relied on an opinion letter provided by MLT Aikins LLP of Winnipeg, Manitoba, Canada to SSR Mining dated July 30, 2017.

Several mineral dispositions have “Good Standing To” dates between July 30, 2017 and the signature date of this Report. These mineral dispositions include MC00003517, MC00003518, MC00003532, MC00003551, MC00003552, MC00003564, MC00003571, MC00003573, MC00003593, MC00003594, MC00003631, MC00003716, and MC00003717. SSR Mining has provided SRK with the disposition abstracts from the Saskatchewan Ministry of the Economy that indicate work filings have been submitted in respect of each of these mineral dispositions and are pending review.

SRK was informed by SSR Mining that there is no known litigation potentially affecting the Seabee Gold Operation.

4 Property Description and Location

The Seabee Gold Operation is located at the north end of Laonil Lake, approximately 125 kilometres northeast of the town of La Ronge, Saskatchewan, Canada (Figure 1). The property hosts two operating mines – the Seabee mine and the Santoy mine – with the Santoy mine situated approximately 14 kilometres to the east of the Seabee mine. A central milling facility is located on the property near the Seabee mine.

The centre of the property is located at approximately 55.7 degrees latitude north and 103.5 degrees longitude west.

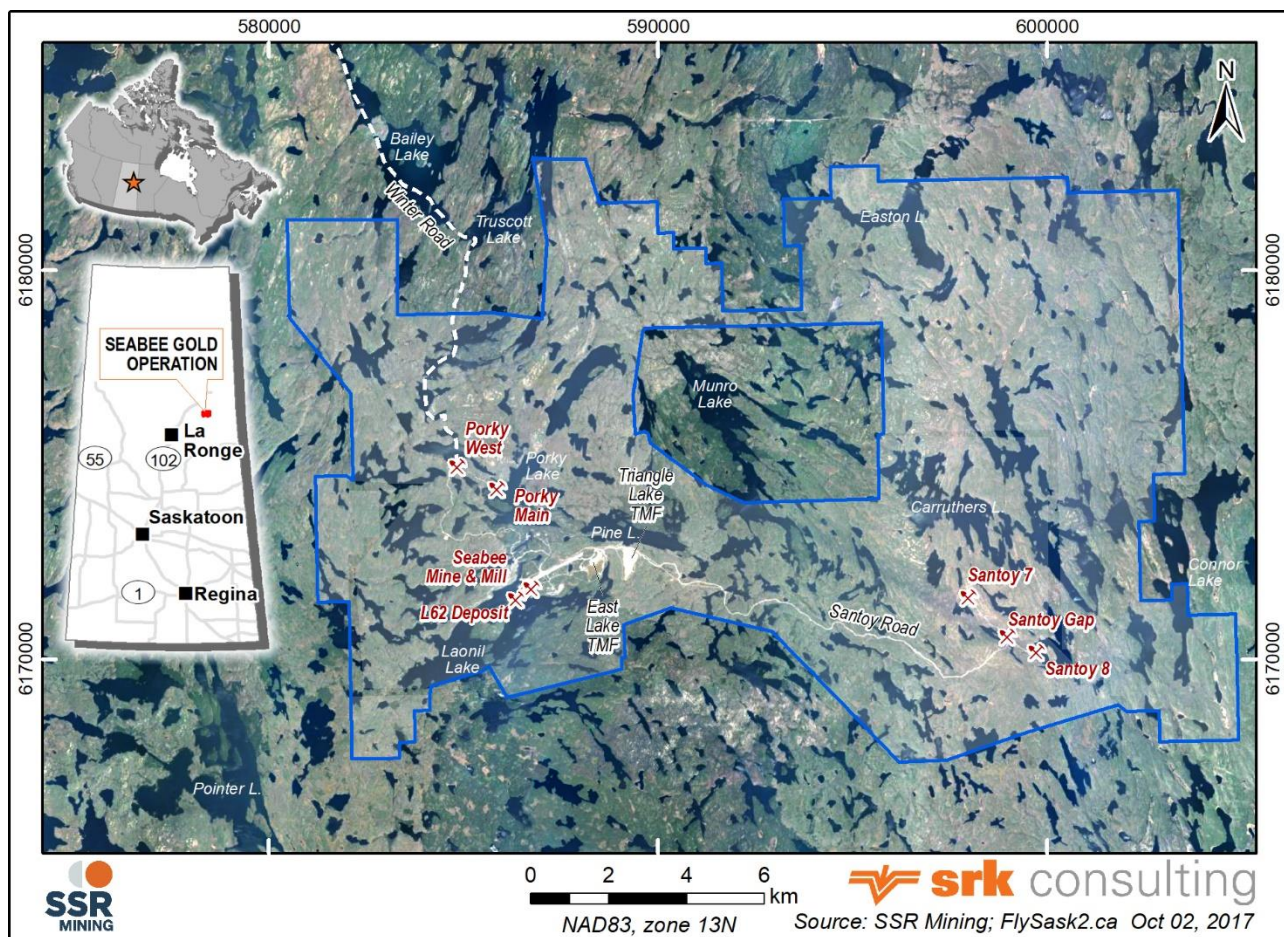


Figure 1: Location of the Seabee Gold Operation

4.1 Mineral Tenure

The Seabee Gold Operation is comprised of six mineral leases and 40 mineral claims that cover an area of approximately 23,700 hectares (Table 1 and Figure 2). SSR Mining holds a 100 percent interest in the property through its wholly-owned subsidiary, SGO Mining.

Table 1: Mineral Tenure Information

Tenement Number	Ownership	Grant Date	Expiry Date	Area (ha)
ML 5519*	SGO Mining Inc.: 100%	24-Feb-1958	23-May-2032	201.00
ML 5520	SGO Mining Inc.: 100%	9-Mar-1999	6-Jun-2018	125.00
ML 5535	SGO Mining Inc.: 100%	3-Apr-2007	1-Jul-2032	45.00
ML 5536	SGO Mining Inc.: 100%	4-May-2007	1-Aug-2023	50.00
ML 5543*	SGO Mining Inc.: 100%	27-Oct-2009	24-Jan-2033	86.00
ML 5551*	SGO Mining Inc.: 100%	3-Oct-2013	31-Dec-2024	114.65
CBS 7058	SGO Mining Inc.: 100%	8-Feb-1980	8-May-2027	1,230.00
CBS 7076	SGO Mining Inc.: 100%	3-Mar-1980	31-May-2027	856.00
CBS 9347	SGO Mining Inc.: 100%	29-Jul-1991	26-Oct-2026	1,369.00
MC00000028	SGO Mining Inc.: 100%	14-Dec-2012	14-Mar-2018	261.92
MC00000030	SGO Mining Inc.: 100%	14-Dec-2012	14-Mar-2018	392.42
MC00000069	SGO Mining Inc.: 100%	19-Dec-2012	19-Mar-2018	904.62
MC00000070	SGO Mining Inc.: 100%	19-Dec-2012	19-Mar-2018	1,226.28
MC00003517	SGO Mining Inc.: 100%	1-May-2015	30-Jul-2017**	113.00
MC00003518	SGO Mining Inc.: 100%	1-May-2015	30-Jul-2017**	216.46
MC00003532	SGO Mining Inc.: 100%	6-May-2015	4-Aug-2017**	162.99
MC00003551	SGO Mining Inc.: 100%	7-May-2015	5-Aug-2017**	493.88
MC00003552	SGO Mining Inc.: 100%	8-May-2015	6-Aug-2017**	1,381.57
MC00003564	SGO Mining Inc.: 100%	11-May-2015	9-Aug-2017**	260.28
MC00003571	SGO Mining Inc.: 100%	12-May-2015	10-Aug-2017**	526.23
MC00003573	SGO Mining Inc.: 100%	12-May-2015	10-Aug-2017**	568.36
MC00003593	SGO Mining Inc.: 100%	15-May-2015	13-Aug-2017**	574.11
MC00003594	SGO Mining Inc.: 100%	15-May-2015	13-Aug-2017**	890.16
MC00003631	SGO Mining Inc.: 100%	25-May-2015	23-Aug-2017**	783.47
MC00003716	SGO Mining Inc.: 100%	12-May-2015	10-Aug-2017**	244.39
MC00003717	SGO Mining Inc.: 100%	12-May-2015	10-Aug-2017**	329.92
S- 97986	SGO Mining Inc.: 100%	22-Mar-1990	19-Jun-2027	250.00
S- 99942	SGO Mining Inc.: 100%	3-Aug-1988	31-Oct-2027	65.00
S-100748	SGO Mining Inc.: 100%	17-Aug-1990	14-Nov-2027	930.00
S-101660	SGO Mining Inc.: 100%	17-Aug-1990	14-Nov-2027	280.00
S-101661	SGO Mining Inc.: 100%	17-Aug-1990	14-Nov-2026	425.00
S-102737	SGO Mining Inc.: 100%	8-Feb-1980	8-May-2027	360.00
S-102738	SGO Mining Inc.: 100%	8-Feb-1980	8-May-2027	130.00
S-102739	SGO Mining Inc.: 100%	8-Feb-1980	8-May-2027	380.00
S-105301	SGO Mining Inc.: 100%	10-Aug-1995	7-Nov-2031	642.00
S-106678	SGO Mining Inc.: 100%	27-Jun-2003	24-Sep-2027	1,880.00
S-106771	SGO Mining Inc.: 100%	28-Mar-1980	25-Jun-2026	196.00
S-106772	SGO Mining Inc.: 100%	28-Mar-1980	25-Jun-2026	193.00
S-106773	SGO Mining Inc.: 100%	30-Sep-2002	28-Dec-2027	328.00
S-110855	SGO Mining Inc.: 100%	8-Feb-1980	8-May-2027	1,321.00
S-110856	SGO Mining Inc.: 100%	7-Sep-1990	5-Dec-2026	693.00
S-111431	SGO Mining Inc.: 100%	26-Aug-2008	23-Nov-2025	774.00
S-111432	SGO Mining Inc.: 100%	26-Aug-2008	23-Nov-2025	847.00
S-111694	SGO Mining Inc.: 100%	7-Sep-1990	5-Dec-2026	233.00
S-113993	SGO Mining Inc.: 100%	7-Sep-1990	5-Dec-2025	29.44
S-113994	SGO Mining Inc.: 100%	7-Sep-1990	5-Dec-2025	341.23
Total				23,704.38

* Mineral leases from which the Seabee Gold Operation is currently producing.

** Work filing(s) have been submitted to the Saskatchewan Ministry of the Economy and are pending review .



Additional mineral leases were added at the Santoy 7 deposit (ML 5535) and Porky West deposit (ML 5536) in 2007, at the Santoy 8 deposit (ML 5543) in 2009, and at the Santoy Gap deposit (ML 5551) in 2013. The Seabee Gold Operation is currently producing from mineral leases ML 5519, ML 5543 and ML 5551.

Annual rental and mining land taxes, and the fulfillment of work commitments, are required by SSR Mining to ensure that the mineral leases and mineral claims remain in good standing.

4.2 Underlying Agreements

The Seabee Gold Operation is subject to production and net smelter return (NSR) royalties payable to third parties. In 2007, Claude Resources entered into a royalty agreement pursuant to which a basic royalty at fixed amounts per ounce of gold production was granted, along with a net profit interest (NPI) of varying percentages, payable only if gold prices exceed a pre-determined threshold. Subsequent to December 31, 2016, SGO Mining exercised its call right under the royalty agreement to purchase the equity of the holder of the basic royalty, effectively terminating this royalty obligation. With respect to the NPI, prior to any NPI payment, SGO Mining is entitled to recover various expenditures, working capital, operating losses, interest charges and asset retirement obligations relating to production at the Seabee Gold Operation. These expenditures are calculated on a cumulative basis and, as at December 31, 2016, the cumulative carry forward amounts remained in a deficiency position under the royalty agreement. The NPI expires on December 31, 2017.

Claude Resources entered into a royalty agreement with Orion Mine Financial Fund (Orion) in 2014 to grant a three percent NSR royalty on gold sales from the Seabee Gold Operation. Payments are to be paid quarterly in cash or in physical gold at the average price of gold in each calendar month. This royalty has subsequently been transferred by Orion to Osisko Gold Royalties Ltd.

In the first quarter of 2016, Claude Resources also granted an aggregate one percent NSR royalty on gold production from certain mineral dispositions to an individual and a private company. These dispositions include MC00003518, MC00003532, MC00003571, MC00003573, MC00003594, MC00003631, MC00003716, and MC00003717 from which the Seabee Gold Operation is not currently producing. SSR Mining has an option to repurchase one half of this NSR royalty for C\$1.0 million.

The Seabee Gold Operation is also subject to certain royalty payments to the Province of Saskatchewan, which are calculated on 10 percent of net operating profits and are payable once capital and exploration costs are recovered. No royalty payments have been made to the Province of Saskatchewan to date.

4.3 Permits and Authorization

Following a successful environmental assessment for a proposed gold mine development in the Province of Saskatchewan, applicants must secure a Surface Lease Agreement and subsequently an *Approval to Operate a Pollutant Control Facilities* (Approval to Operate) both issued from the Province of Saskatchewan's Ministry of Environment.

The Seabee Gold Operation currently has a valid surface lease with the Province of Saskatchewan, which was amended in March 2010. This surface lease provides SSR Mining Crown land surface rights necessary to carry out the mining, milling and associated operations at the Seabee Gold Operation. The existing surface lease is in effect from March 2010 to its expiry date of May 31, 2040 (SMOE 2010).

The Seabee Gold Operation also holds an *Approval to Operate* No. PO16-002. This approval is issued by the Province of Saskatchewan's Ministry of Environment pursuant to *The Environmental Management and Protection Act, 2010* and its regulations. This approval, which is a multi-year approval issued January 2016, is valid until September 30, 2019. Renewal of this approval is triggered through an application submitted to the Ministry of Environment at least 90 days prior to

its expiry date. Subject to the terms and conditions of this approval, SSR Mining is authorized to operate all pollutant control facilities associated with the operation's mine and mill (SMOE 2016).

The Seabee Gold Operation is also obligated to operate in compliance with the Canadian Metal Mining Effluent Regulations issued pursuant to the *Canadian Fisheries Act*.

The Seabee Gold Operation is currently in compliance with all of its environmental approvals and authorizations.

To the extent known, no other significant factors or risks affect access, title, or the right or ability to perform work at the Seabee Gold Operation.

4.4 Environmental Considerations

Further discussion is provided in Sections 18 and 20 of this Report. The primary environmental considerations and potential liabilities with the Seabee Gold Operation are related to the operation's solid waste (mill tailings) and the treatment and release of mine and mill effluent. The tailings produced at the mill are currently managed in permanent management facilities (the East Lake tailings management facility and the Triangle Lake tailings management facility). The operation of these two facilities is conducted in accordance with the Seabee Gold Operation's Tailings Operation, Maintenance and Surveillance Manual (SRK 2017a) and the Canadian Dam Safety Guidelines. In addition, the current approved Seabee Gold Operation Preliminary Decommissioning and Reclamation Plan, 2016 Update (SRK 2017b) addresses all potential long-term environmental and physical stability issues of the containment structures in accordance with the Canadian Dam Association Guidelines.

With respect to water management and treatment, three discharge points exist at the operation. Mine water from the Seabee mine (also referred to as the 2B mine) is pumped to surface settling ponds which discharge to Laonil Lake. Mine water collected in the Santoy mine is pumped to surface and discharged to the Santoy settling ponds, which is treated in a Moving Biological Bed Reactor (MBBR) water treatment plant in order to remove ammonia and nutrients from the water prior to discharge to Lizard Lake. In addition, mill effluent accumulating in the two tailings management facilities, that is not recycled to the mill as make up process water, is treated in a chemical treatment plant through the addition of lime, hydrogen peroxide and ferric sulphate. The treated water from this plant currently discharges to the East Pond which flows through a series of wetlands and ultimately reports to the northern arm of Laonil Lake. A new chemical treatment plant combined with a MBBR was recently constructed to replace the existing chemical treatment plant. Both water treatment plants operate in compliance with the Seabee Gold Operation's *Approval to Operate*. All water discharges to the environment are in compliance with applicable provincial and federal regulations.

5 Accessibility, Climate, Local Resources, Infrastructure, and Physiography

5.1 Accessibility

Access to the Seabee Gold Operation is by fixed-wing aircraft from the town of La Ronge, Saskatchewan or the city of Flin Flon, Manitoba to a 1,275-metre airstrip located on the property (Figure 3). During the winter months, a 60-kilometre winter road is built between the mine site and Brabant Lake on Highway 102, approximately 120 kilometres north of La Ronge, to transport heavy supplies and equipment by truck.

5.2 Local Resources and Infrastructure

SSR Mining employs a workforce of approximately 300 employees who work on rotating schedules at the Seabee Gold Operation. Over 200 employees can be accommodated at the Seabee Gold Operation at one time; 201 at the Seabee mine camp and 22 at the Santoy mine camp. Both sites are equipped with a kitchen and dining facility, and small recreation room.

Electrical power to the property is provided by the provincial power authority, the Saskatchewan Power Corporation, via a 138-kilovolt hydroelectric transmission line from Island Falls. Potable water is obtained locally through SSR Mining's on-site potable water system.

5.3 Climate

The province of Saskatchewan is generally considered to have a continental climate, with temperatures and precipitation that vary significantly between seasons; winter is typically cold and dry, while summer is warm and wet. The majority of the province's precipitation comes from summer rainfall, however, cool winters with long-surviving snowpack also contribute to greater precipitation.

The climate at the Seabee Gold Operation is similar to that of the nearby Environment Canada weather station at Island Falls. The mean monthly temperatures recorded at this station between 1981 and 2010 range from -22.2 degrees Celsius in January to 17.3 degrees Celsius in July. Daily maximum temperatures have ranged on average from -15.9 degrees Celsius in January to 22.9 degrees Celsius in July, while daily minimum temperatures have ranged on average from -28.4 degrees Celsius in January to 11.6 degrees Celsius in July.

In the spring and summer months, historic total rainfall ranges on average from 6.8 millimetres in April to 84.6 millimetres in July, with mean annual rainfall totalling 347.9 millimetres. The winter months can experience significant snowfall, with historic monthly averages of 17.9 centimetres in February and March and up to 26.9 centimetres in November, with mean annual snowfall totalling 138.5 centimetres. A mixture of rain and snowfall is commonly experienced during the spring and fall.



5.4 Physiography

The Seabee Gold Operation is located within the Precambrian Canadian Shield environment, which is vegetated with a mixture of deciduous and coniferous trees and shrubs typical of a boreal forest, as shown in Figure 3. The area has been glacially scoured and is comprised of rocky, ice molded ridges separated by lakes or muskeg filled depressions. Local relief in the surrounding area can be high, with the shoreline rising sharply to an elevation of 15 to 20 metres above the lake surface (Golder 2009).

The site is relatively flat, with much of the area comprised of irregular, hummocky, rocky exposures. Low areas between hummocks that may have 9 to 5 metres of relief are commonly filled with pockets of glacial till, and occasionally with muskeg. Overburden soils are thin in this area, and often the rock outcrops are exposed (Golder 2009).

6 History

The Laonil Lake region has been intermittently explored since the 1940s, with the first gold discovery made in 1947 by prospectors working on behalf of Cominco Inc. (Cominco). Cominco conducted an extensive prospecting, geological mapping, trenching and diamond drilling program between 1947 and 1950, and in 1958 was granted 10 quartz mining leases covering the property on which the Seabee Gold Operation currently lies. From 1974 to 1983, Cominco conducted detailed drilling and exploration, and in 1983 sold the property to BEC International Corporation (BEC). BEC subsequently sold the property to Claude Resources in 1985.

In June 1985, Claude Resources optioned the property to Placer Development Limited (subsequently Placer Dome Inc. (Placer)). Placer conducted an extensive exploration program which involved geological mapping, trenching and stripping, geophysical, geochemical, environmental and metallurgical studies, as well as surface and underground drilling. Upon completion of the program, Placer allowed its option to expire and returned the property to Claude Resources in June 1988.

Claude Resources performed a geological review and analytical study to validate the work completed by Placer, and Cominco Engineering Services Limited (Cominco Engineering) subsequently completed bulk sampling and drilling as part of a feasibility study for the Seabee deposit. ACA Howe International Limited (ACA Howe) completed a Mineral Reserve estimate in December 1988, and Cominco Engineering submitted a positive feasibility study in August 1989, which was further revised in May 1990. In the summer of 1990, Claude Resources placed the Seabee deposit into production and construction of the Seabee mine was initiated. Mill construction was completed in late 1991, and mining commenced in December 1991.

In 1998, prospecting and mapping was conducted by Claude Resources on the Seabee Gold Operation site and a number of new discoveries were made, including the Porky West zone in 2002, the Santoy 7 deposit in 2004, the Santoy 8 and Santoy 8 East deposits in 2005, and the Santoy Gap deposit in 2010. Permit applications were submitted in 2005 to build an all-weather access road and conduct bulk sampling, and permission was subsequently granted to bulk sample the Santoy 7 and Porky West zones.

Commercial production at the Santoy 7 deposit was achieved in 2007, and an economic study to evaluate the Mineral Resource at the Santoy 8 deposit was conducted in 2008. Portal construction and surface infrastructure development of the Santoy mine was initiated in late 2009, and environmental studies and permitting for commercial mining of the Santoy 8 and Santoy 8 East deposits was completed in 2010. Underground development continued in 2010, and the Santoy mine advanced towards commercial production in the second quarter of 2011.

Claude Resources' 2012 and 2013 exploration programs focused on the Santoy Gap deposit and establishing its geological and structural relationship to the Santoy 8 deposit. In February 2013, a shaft extension project was completed at the Seabee mine to reduce trucking distance and ore handling. In 2014, the ventilation raise at the Santoy Gap deposit was completed and production was initiated. During 2015, an underground drill chamber was completed to begin drill testing the plunge continuity of the Santoy 8 deposit.

On May 31, 2016, SSR Mining acquired Claude Resources and the Seabee Gold Operation.

Mineral Resource and Mineral Reserve estimates have been prepared at various stages for the Seabee Gold Operation. The previously filed NI 43-101 technical report for the Seabee Gold Operation (Claude 2013), reported combined Measured and Indicated Mineral Resources of 469,600 tonnes at a grade of 5.10 g/t gold for 77,000 ounces of contained gold and Inferred Mineral Resources of 2,957,600 tonnes at a grade of 6.35 g/t gold for 603,400 ounces of contained gold (as at December 31, 2012). Proven and Probable Mineral Reserves of 2,785,200 tonnes at a grade of 6.19 g/t gold for 554,100 ounces of contained gold (as at December 31, 2012) were reported. These are superseded by the Mineral Resource and Mineral Reserve estimates documented in this Report.

The Seabee Gold Operation has produced over 1 million ounces of gold since production began in 1991. Production has steadily increased to peak over the past three years, to achieve outputs of 62,984, 75,748 and 80,351 ounces of gold during 2014, 2015 and 2016, respectively. A summary of the production history of the Seabee Gold Operation since 1996 is presented in Table 2.

Table 2: Historic Production from the Seabee Gold Operation (1996-2016)

Year	Tonnes Milled	Tonnes per Day	Gold Grade Processed	Recovery	Ounces Produced	Cash			Kitco Price US\$/oz
						US\$/oz	C\$/oz	Exchange	
1996	193,735	531	6.45		36,709	345			388
1997	211,481	579	9.36	92.2	58,467	215			331
1998	224,600	615	9.27	92.6	60,200	168			294
1999	245,300	672	7.30	92.3	54,100	193			279
2000	237,500	651	8.58	87.9	58,300	190			279
2001	274,782	753	6.13	88.8	46,300	221			271
2002	201,861	553	6.59	93.7	41,500	246			310
2003	208,867	572	7.95	94.7	50,800	253	354	0.7147	363
2004	186,900	512	7.15	95.2	41,200	297	386	0.7694	410
2005	236,400	648	6.32	92.9	42,200	358	434	0.8249	445
2006	246,000	674	6.16	93.6	46,300	396	449	0.8820	603
2007	227,700	624	6.35	95.4	44,323	586	629	0.9316	695
2008	228,400	626	6.46	95.8	45,466	683	729	0.9369	872
2009	247,641	678	6.17	95.3	46,827	613	699	0.8770	972
2010	203,958	559	7.55	95.5	47,270	692	713	0.9705	1,225
2011	257,181	705	5.68	95.3	44,750	918	908	1.0110	1,572
2012	275,235	754	5.86	95.6	44,756	998	997	1.0010	1,669
2013	280,054	767	5.11	95.3	43,850	954	983	0.9705	1,411
2014	279,597	766	7.32	95.7	62,984	757	836	0.9055	1,266
2015	277,386	760	8.82	96.3	75,748	525	672	0.7813	1,165
2016	312,679	857	7.91	96.6	80,351	639*	840*	0.7813	1,250

* Period from and after acquisition of Claude Resources by SSR Mining on May 31, 2016 SSR to and including December 31, 2016.

7 Geological Setting and Mineralization

7.1 Regional Geology

Northern Saskatchewan forms part of the Churchill Province of the Canadian Shield, and has been subdivided into a series of litho-structural crustal units, of which the Seabee Gold Operation is located within the Glennie domain of the Proterozoic Trans-Hudson Orogen (Figure 4 and Figure 5; Corrigan et al. 2007). The Trans-Hudson Orogen marks the collisional suture zone between the Rae-Hearne, Sask and Superior cratons formed during the closure of the Manikewan ocean (Stauffer 1984) and is divided into two distinct zones: namely, the Cree Lake Zone and the Reindeer Zone. The Cree Lake zone is composed of early Proterozoic continental shelf sedimentary rocks that overlie Archean rocks of the Hearne Province to the west. The Reindeer zone is comprised of mid-oceanic ridge basalts, oceanic island-arc basalts, inter-arc volcanogenic sedimentary rocks, and molasse-type sedimentary rocks. Plutonic rocks of various composition and age intrude the supracrustal sequence.

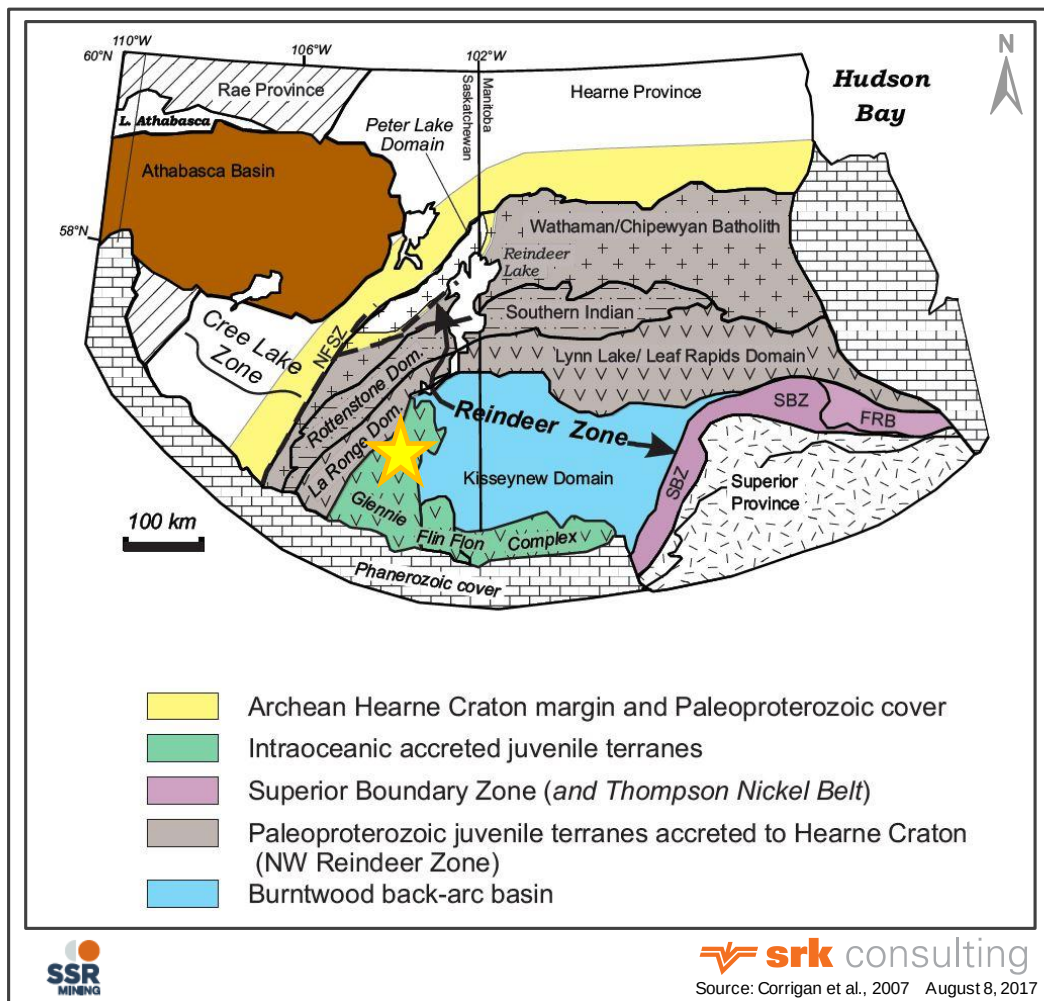


Figure 4: Cree Lake Zone and Reindeer Zone of the Trans-Hudson Orogen

The Seabee Gold Operation (star) is located within the Glennie Domain (Modified by Wood [2016] from Corrigan et al. [2007])

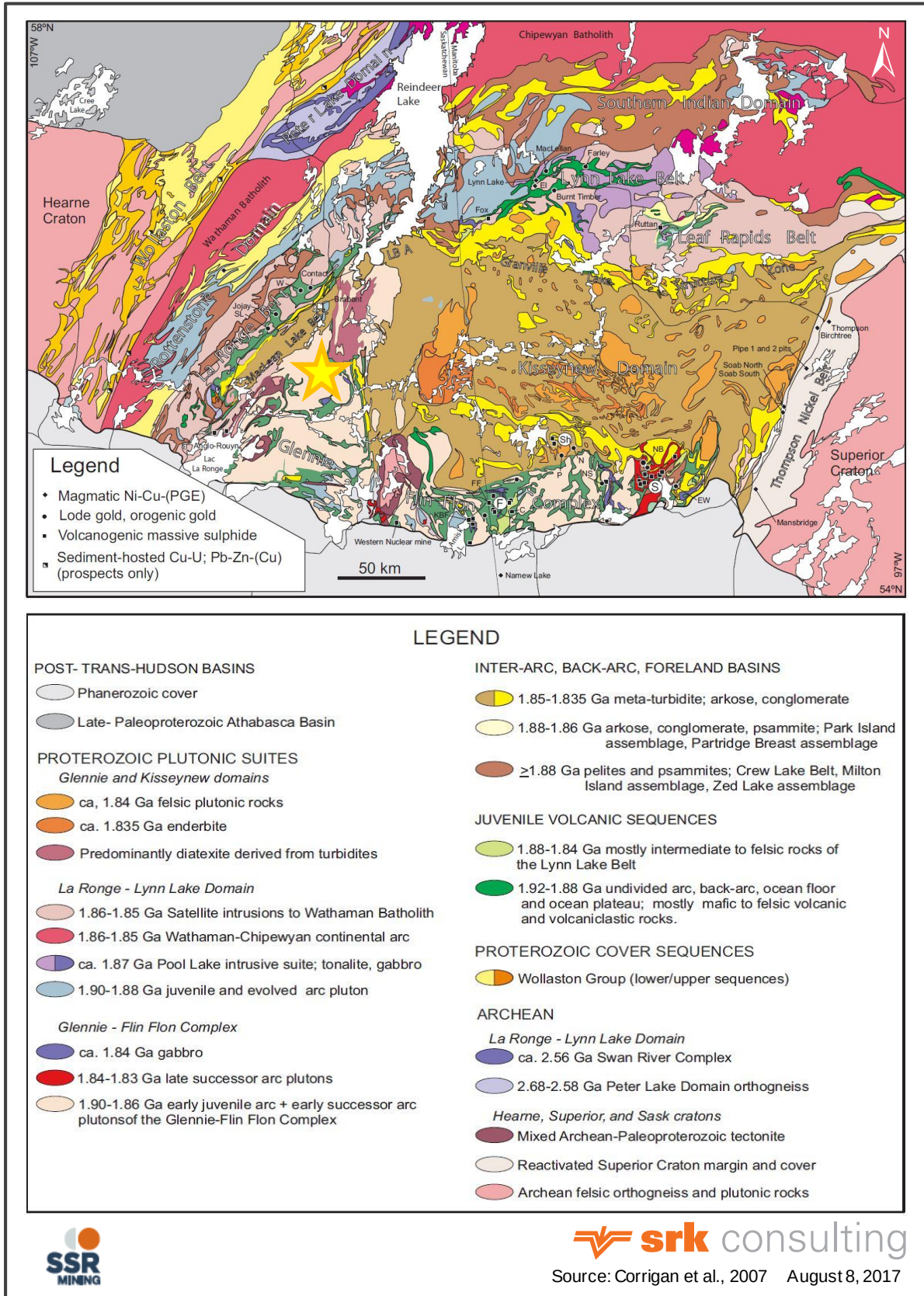


Figure 5: Regional Geology of the Southwestern Trans-Hudson Orogen
 The Seabee Gold Operation marked by star (Modified from Corrigan et al. [2007])

The Reindeer zone is further subdivided into litho-tectonic domains based on similarities of lithology, metamorphic grade, and structure (Lewry and Sibbald 1977), of which the Glennie domain is one such component. The Glennie domain is wedge shaped, and is characterized by arcuate belts of Lower Proterozoic supracrustal rocks separated by granitoid gneisses and granitoid intrusions (Macdonald 1987). It is bounded on the west by the north-northeast trending Stanley shear zone and bounded on the east by the north-south trending Tabbernor fault zone. To the south, Phanerozoic sedimentary rocks cover the Glennie domain.

Lewry et al. (1990) interpreted the Reindeer zone as a folded stack of nappes and thrust complexes divided by ductile mylonitic zones, emplaced during the terminal collision of the Trans-Hudson Orogen. The interpretation was based on Archean rocks that were found within the Glennie domain and neighbouring Hanson Lake block (Bell and Macdonald 1982; Chiarenzelli et al. 1987; Craig 1989) and imply that the Reindeer zone is underlain in part by Archean rocks (Lewry et al. 1990; Bickford et al. 1990). Extensive seismic geophysical studies (White et al., 1994) and samarium-neodymium systematics (Chauvel et al. 1987) support the interpretation. The Seabee Gold Operation is contained within one of the nappe sheets, referred to as the Wapassini Allochthon, and is interpreted as an upper tectonic assemblage separated from a lower sequence (the Iskwatikan Subdomain) by a high strain zone known as the Guncoat Gneisses (Macdonald 1987). The allochthon was refolded and intruded by later plutons.

7.2 Property Geology

The Seabee Gold Operation is located within the northern portion of the Pine Lake greenstone belt. The belt has a strike length in excess of 50 kilometres and comprises a variety of geochemically distinct tholeiitic mafic volcanic rocks formed in juvenile island arc settings, along with contemporaneous mafic intrusive rocks, volcanoclastics, sediments and felsic intrusions of varying age, as shown in Figure 6. Metamorphic grade across the Pine Lake greenstone belt ranges from upper greenschist to upper amphibolite, with the Seabee Gold Operation hosted in the latter. The belt has been complexly folded by at least four major phases of deformation that are observed across the Seabee Gold Operation site and elsewhere in the Glennie domain.

The Seabee Gold Operation can be subdivided into three main geological domains:

- Seabee mine: The Seabee mine area is hosted within a coarsely layered mafic intrusion dominated by gabbro in the mine sequence.
- Santoy: The Santoy mine area is hosted within a sequence of mafic volcano-sedimentary rocks separated by generally north-south trending thrust faults.
- Porky: The Porky deposit area is a mineralized trend hosted along a 12-kilometre long openly folded unconformity, separating arenaceous sedimentary rocks of the Rae Lake synform to the north from mafic volcanic rocks of the Seabee mine area to the south.

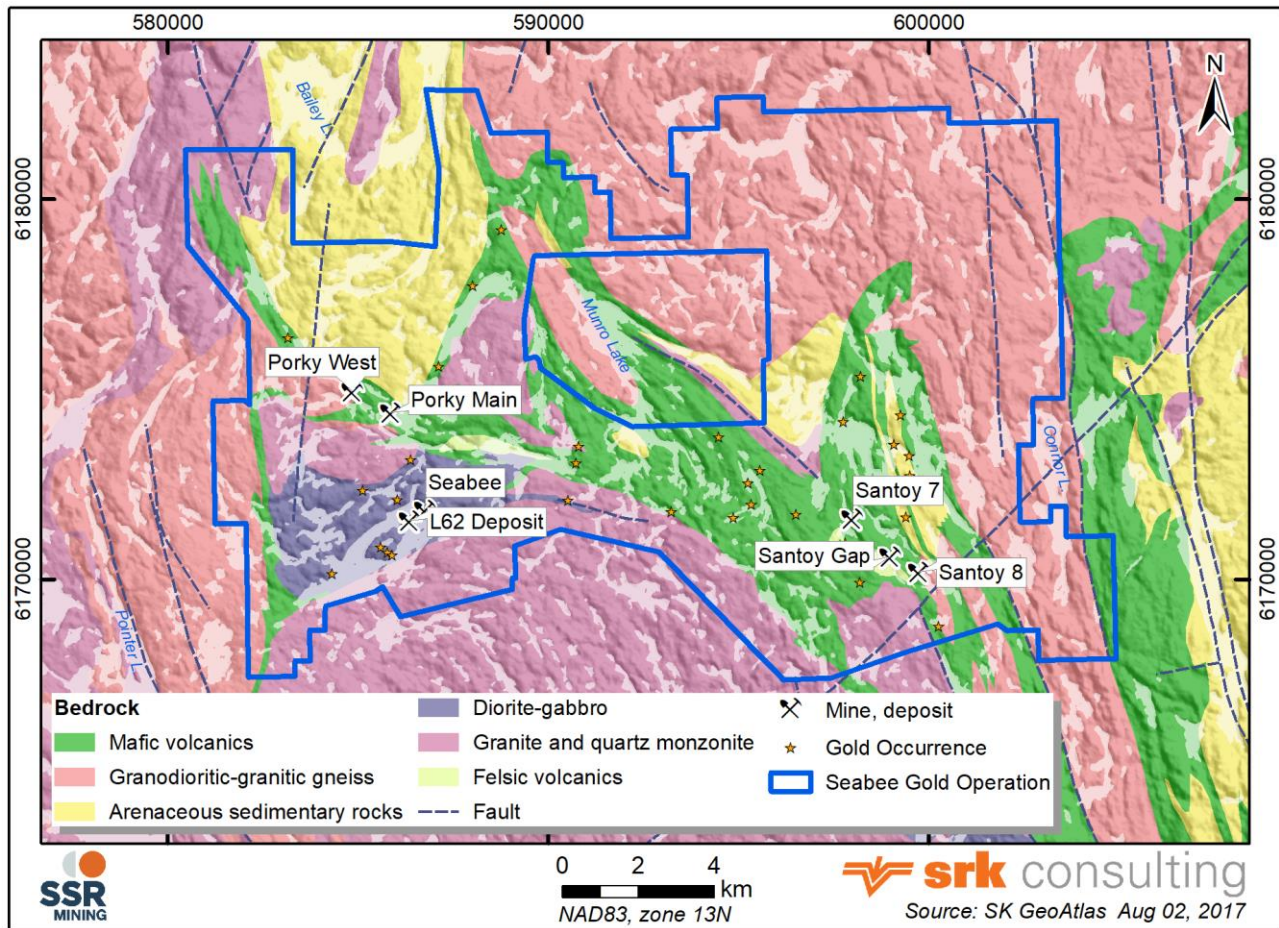


Figure 6: Local Geology Setting

7.3 Structural Setting

Coeval folding and thrusting during a protracted period of progressive deformation associated with the collision and amalgamation of several Archean continental fragments resulted in four major phases of deformation on the Seabee Gold Operation property and are characterized as follows (SRK 2009):

- D₁ (approximately 1,870 to 1,845 million years ago [Ma]): Development of gneissic foliation and intrafolial folds associated with amalgamation of the Glennie and Flin Flon domains.
- D₂ (approximately 1,845 to 1,830 Ma): South-directed thrusting and roughly east-west folding associated with the collision of the Reindeer zone and Sask craton.
- D₃ (approximately 1,830 to 1,800 Ma): West-directed thrusting associated with north- to northwest-trending folding and transposition, and strike-slip reactivation of D₂ shear zones controlled by the collision of the Superior and Sask cratons. Peak amphibolite grade metamorphism was reached at approximately 1,810 Ma.
- D₄ (approximately 1,830 Ma): Refolding of D₃ folds into regional type 1 and type 2 interference patterns associated with the final formation of the Trans-Hudson Orogen.

SRK (2009) generated an integrated interpretation using published literature, regional mapping data, drilling data, and geophysical data that was collected during Goldak Airborne Surveys' (Goldak) 2007 (Goldak 2007) aeromagnetic survey over the Seabee Gold Operation (see Section 9.2.1). The following observations were made (Figure 7):

- Minor D_1 faults trend north-south in the southwest corner of the interpretation area; Gneissic foliation and intrafolial folds cannot be observed on the scale of interpretation. D_1 faults are present where a narrow strip of Pine Lake greenstone is interpreted to make the boundary between the Laonil Lake intrusive complex to the east and granodiorite units to the west. Any larger scale D_1 features have been overprinted by subsequent deformation events.
- Regional north-south compression during D_2 focussed on main deformation corridors and lithological contacts in the Laonil Lake intrusive complex. The Porky Lake metasedimentary belt was emplaced as late-stage southward thrust sheet(s) on the Pine Lake greenstone belt:
 - Early D_2 gold mineralization in the Seabee deposit is hosted in isoclinally folded quartz veins within D_2 reverse shear zones that were reactivated as dextral shear zones during D_3 . Mapped veins appear offset by late D_2 structures that are subparallel to the Eyahpaise Lake pluton intrusive margin (1,859 Ma), suggesting that gold emplacement commenced prior to 1,859 Ma.
 - Late D_2 gold mineralization in the Porky deposits are associated with the development of a south-verging thrust fault which formed late in the D_2 phase when the Porky Lake metasedimentary belt was emplaced on the Pine Lake greenstone belt. The hosting fault was subsequently folded along a north-south axis, the Ray Lake synform, during D_3 deformation.
- East-west compression during D_3 reactivated deformation corridors and D_2 structures in the Laonil Lake intrusive complex. Dextral kinematics were observed on west-southwest – east-northeast components, and sinistral kinematics were observed on all other components. Sinistral strike-slip shear zones observed in the central domain of the interpretation area, and north to northwest trending oblique-slip shear zones and folds in the eastern and western domains of the interpretation area. D_3 folding affects D_2 thrust faults (i.e., Ray Lake synform):
 - Gold mineralization in the Santoy deposits are associated with north-northwest trending D_3 reverses and sinistral-reverse shear zones. It is possible the deposits are controlled by fault intersections, enhancing permeability.

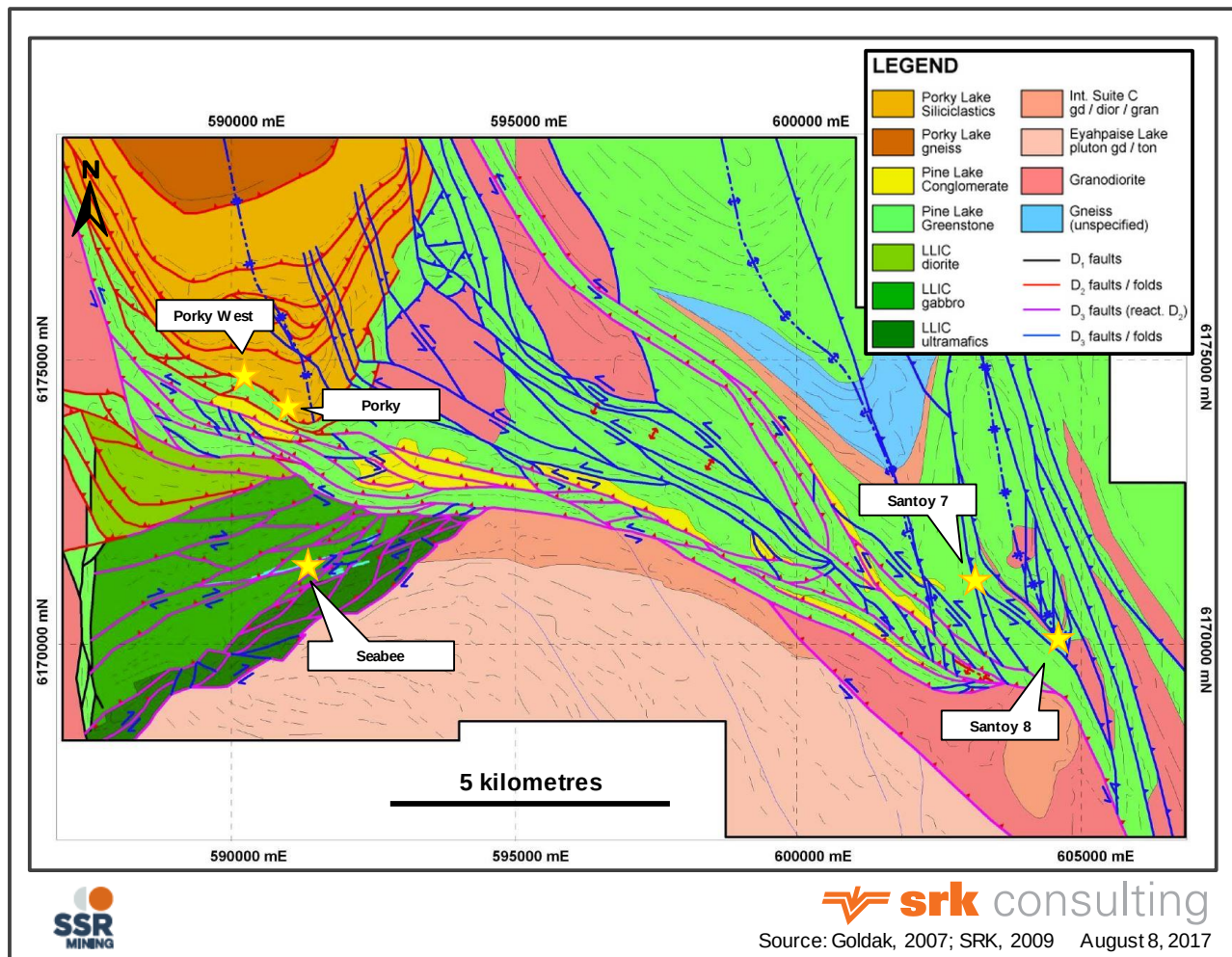


Figure 7: Integrated Structural Analysis of the Seabee Gold Operation by SRK (2009) Based on Goldak's 2007 Aeromagnetic Survey

7.4 Mineralization

Gold mineralization at the Seabee mine is hosted within an extensive network of sub-parallel shear structures, which crosscut the Laonil Lake intrusive complex. Vein mineralogy is dominantly quartz with pyrite, pyrrhotite and chalcopyrite, and accessory tourmaline and carbonate. Gold occurs primarily as free, finely disseminated flakes and films replacing pyrite or at sulphide boundaries. Higher grade gold values are most often associated within sulphide rich zones or at vein junctions (Figure 8). Silicification is the most common alteration type observed at the Seabee mine.

Gold mineralization at the Santoy mine is hosted within calc-silicate altered shear structures with diopside-albite +/- titanite-bearing quartz veins, and occurs in gold-sulphide-chlorite-quartz veins in the shear zones, near or in the granodiorite and granite sills. Diopside-albite calc-silicate alteration facies are the main host to gold mineralization in the Santoy 8A and Santoy Gap 9A, 9B and 9C zones. The Santoy Gap deposit occurs along a major inflection of the Santoy Shear zone between the Santoy 7 and Santoy 8 deposits.



Figure 8: Typical Mineralization Observed at the Seabee Gold Operation (SRK, 2009)

At the Porky deposit, the brittle-ductile lode gold system is hosted along a thick corridor of calc-silicate altered mafic volcanics and arenaceous sedimentary rocks that straddle a major unconformity along the southern margin of the Rae Lake synform. Both the Porky Main and Porky West deposits are characterized by the same calc-silicate alteration package, however, the unconformity and arenites host most of the auriferous quartz veins at the Porky West deposit.

Table 3 summarizes the key stratigraphic and structural elements controlling the mineralization at each of the Seabee Gold Operation deposits.

Table 3: Key Stratigraphic and Structural Elements Controlling Mineralization at the Seabee, Santoy, and Porky Deposits (SSR Mining 2017b)

Area	Deposit Name	Main Control on Mineralization	Host Rock	Strike-Length (m)	Vertical Extent (m)	Thickness (m)	Trend in Plan
	L62	Quartz-tourmaline veins in shear zones.	Laonil Lake Intrusive Complex gabbro.	150	700	1 to 11	E
Seabee	2 Vein	Quartz-tourmaline veins in shear zones.	Laonil Lake Intrusive Complex gabbro.	1,800	1,400	2 to 7	ENE
	5-1 Shear	Quartz-tourmaline veins in shear zones.	Laonil Lake Intrusive Complex gabbro.	800	1,100	1 to 11	ENE
Santoy	Zone 7	Quartz veins in diopside-albite (calc-silicate) altered shear zones.	Mafic metavolcanic rocks and lesser dioritic to granodioritic sills	330	120	2 to 10	N
	Zone 8	Quartz veins in diopside-albite (calc-silicate) altered shear zones.	Mafic metavolcanic rocks and lesser dioritic to granodioritic sills.	600	500	2.5 to 7	NW
	Zone 8 East	Quartz veins and flooding in sheared and isoclinally folded granodiorite.	Granodiorite stock in fold nose near hangingwall contact with mafic metavolcanic rocks.	200	250	1.5 to 15	NNW
	Zone 9	Quartz veins in diopside-albite (calc-silicate) altered shear zones.	Mafic metavolcanic rocks and lesser dioritic to granodioritic sills.	650	650	2 to 30	NW
Porky	Porky Main	Quartz veins in diopside-chlorite-actinolite (calc-silicate) altered shear zones.	Mafic metavolcanic rocks and to a lesser extent arenaceous sedimentary rocks.	280	180	1 to 4	SSE
	Porky West	Quartz veins in silicified calc-silicate altered shear zones.	Arenaceous sedimentary rocks and to a lesser extent mafic metavolcanic rocks.	400	250	1.5 to 12	E

8 Deposit Types

The Seabee mine, Santoy mine and Porky deposits host mesothermal, quartz-vein hosted lode gold deposits developed in major brittle-ductile to ductile shear systems. The gold mineralization throughout the Seabee Gold Operation exhibits complex geometrical patterns attributed to a combination of structural and/or lithological controls.

Mesothermal gold deposits typically emplaced as a system of en echelon veins, forming tabular veins in competent host rock lithologies, or as stockwork veinlets and stringers in less competent host rock lithologies. Lower grade bulk-tonnage style mineralization with gold associated with disseminated sulphides may develop in areas peripheral to quartz veins. Mesothermal gold deposits can also be related to broad areas of fracturing, where gold and sulphides are associated with quartz veinlet networks. The quartz veins are typically in sharp contact with the wallrock and can display a variety of textures including massive, ribboned or banded, and stockworks with anastomosing gashes and dilations, which may subsequently be altered or destroyed during deformation. Gold-quartz veins are found within zones of intense and pervasive carbonate alteration along faults proximal to transcrustal breaks, and often occur at a high angle to the primary collisional fault zone. They are commonly associated with late syn-collisional, structurally controlled intermediate to felsic magmatism, with economic deposits generally hosted by large competent units, such as intrusions or blocks of obducted oceanic crust (Ash and Aldrick 1996).

Delaney (1992) suggested that lithological heterogeneities between feldspar porphyry dikes and gabbros of the Laonil Lake Intrusive Complex are responsible for the localization and propagation of the shear zone. At Seabee, the structures trend between 045 to 085, and dip north near vertically. Three discrete subsets of structures have been recognized trending at 070, 085, and 045, with the 070 structures containing the auriferous veins. At Santoy, the structures trend between 340 to 315, and dip moderately to the east. Vein geometry within the shear zones are commonly a combination of the S and Z oblique and extensional types, and second order or Riedel shears.

High gold grades occur at the intersection of the primary S shears with subordinate shear structures and/or where potassic altered diorite dikes have intruded the Laonil Lake gabbro prior to strain occurrence. It is probable that secondary dikes introduced additional gold to the system, which was later remobilized under strain conditions.

Exploration at the Seabee Gold Operation is guided by applying techniques consistent with the identification and discovery of other quartz-vein lode gold systems. Airborne magnetic data is used in surface exploration to identify structural corridors and asymmetrical features, folds and target areas that are known to host gold on the property. This geophysical data is used in conjunction with regional and detailed geological mapping to identify major zones of shearing and alteration, of which calc-silicate alteration has proven to be the most prospective variety on the Seabee Gold Operation property.

Geochemical soil sampling is also used as a regional exploration technique to identify gold and trace element vectors associated with Seabee-style gold mineralization, and has successfully identified gold mineralization at various locations across the property. Once targets have been delineated by the above exploration methods, diamond drilling at wide spacing is used to test the structural systems to allow for SSR Mining's minimum threshold deposit size to be identified based on observed local grade.

9 Exploration

9.1 Surficial Geochemistry

Historically, several rock and soil sampling programs have been executed on the Seabee Gold Operation property (Figure 9 and Figure 10).

Placer collected over 1,200 surface rock samples and nearly 7,000 soil samples between 1985 and 1988. The majority of samples were collected from the western portion of the property in the vicinity of Laonil Lake and Pine Lake, and proximal to and north of Porky Lake. Sample spacing was approximately every 20 to 25 metres on 100 metres spaced lines.

Claude Resources collected nearly 2,000 surface rock samples and over 7,000 soil samples between 1990 and 2013. Soil samples were primarily collected from the western portion of the property, with additional samples collected in the south-central portion of the property and in the Santoy area. Sample spacing was planned every 20 to 25 metres on 100 metre spaced lines. In 1990, rock samples were largely collected around the Laonil Lake, Porky Lake and Pine Lake areas, after which time the focus of exploration shifted to the Santoy area and samples were collected from the southeastern portion of the Seabee Gold Operation property.

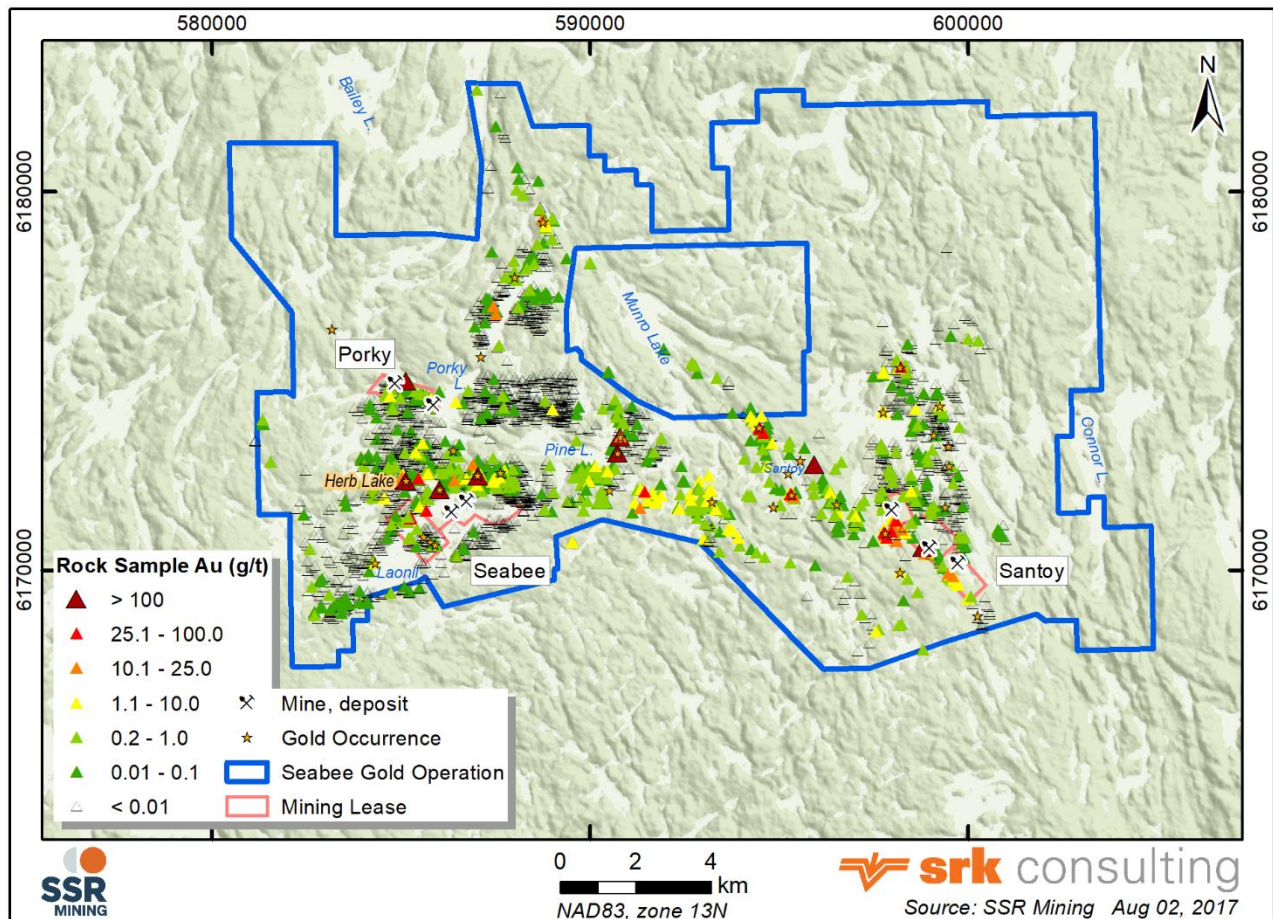


Figure 9: Historic Rock Samples Collected at the Seabee Gold Operation

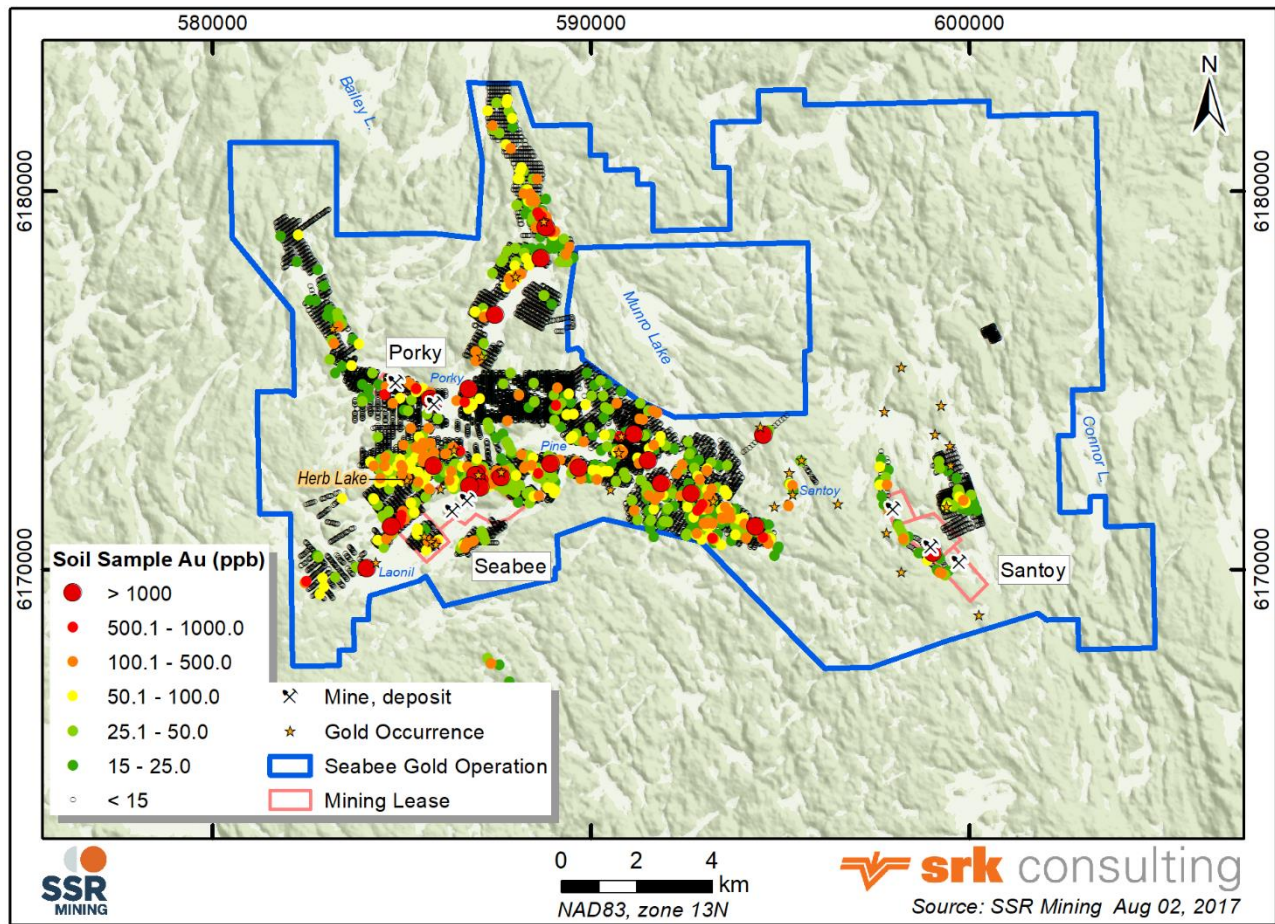


Figure 10: Historic Soil Samples Collected at the Seabee Gold Operation

Upon its acquisition of the Seabee Gold Operation, SSR Mining performed a review of all exploration activities conducted on the property by previous operators. In addition to the data review, SSR Mining executed an exploration program that included detailed mapping of the Herb West and Santoy Lake areas, as well as the collection of accompanying soil samples to be submitted for gold assay. Limited anomalous occurrences were identified from grab and soil sample results, and no new showings or gold in soil trends were recognized. SSR Mining plans to map additional regions to the north and east within the Herb Lake area as additional shear zones are targeted.

In the Santoy Lake area, mapping extended from Santoy Lake to the west end of the Santoy mine. Soil sampling conducted over the same area resulted in the collection of 501 samples taken every 25 metres on lines spaced 200 metres apart. No anomalous trends of significance were identified. However, SSR Mining has planned further exploration in prospective areas east and west of the 2016 exploration program area.

9.2 Geophysical Surveys

9.2.1 Fixed Wing Aeromagnetic Survey 2007

Goldak performed an aeromagnetic survey over the Seabee Gold Operation property on behalf of Claude Resources from February 25 to March 15, 2007 (Goldak 2007). North-south traverse lines

were flown with 100-metre spacing and a control line separation of 1,000 metres, totaling 2,284 line kilometres of high resolution magnetic data collected. Nominal terrain clearance was 80 metres above ground level.

In 2009, SRK reviewed the aeromagnetic survey to make an integrated interpretation with the addition of using published literature, regional mapping data, and drilling data (Figure 7). The following recommendations were made regarding regional targeting:

- Regional deformation corridors have high prospectivity for gold, as structural complexity in the region over time has enhanced permeability.
- Key locations for gold mineralization can be identified by understanding the kinematics active during gold mineralization in combination with the interpreted fault geometry:
 - Dilational jogs along D₂ and D₃ shear zones: shallower dipping segments of D₂ and D₃ reverse shear zones (similar setting to Santoy 7), left steps along D₃ sinistral shear zones, and right steps along D₃ dextral shear zones.
 - Fault intersections (*i.e.*, deformation corridors).
- Additional parameters that enhance gold mineralization in the Seabee area include:
 - High competency contrast (*i.e.*, variations in lithology).
 - Presence of multiple intrusions exploiting similar structural pathways as potential hydrothermal fluids.
 - Proximity to the Pine Lake conglomerates, a structurally bound conglomerate package similar to the Abitibi Timiskaming conglomerates.

9.2.2 Titan-24 DC/IP and MT Survey 2010

In early 2010, Quantec Geoscience Ltd. (Quantec) were commissioned to perform a Titan-24 direct current/induced polarization and audio-magnetotelluric ground geophysical survey over the Santoy Gap area on behalf of Claude Resources. The Titan-24 direct current and induced polarization data were inverted to produce cross-sections of the resistivity and chargeability variations along four survey lines. In its standard configuration, the Titan-24 surveys typically image direct current resistivity and induced polarization to 500 to 750 metres in sub-vertical tabular geological settings, and up to 50 percent more for sub-horizontal geological settings. Audio-magnetotelluric inversion depth is generally limited to approximately half the length of the survey line or profile.

Quantec (2013) made the following observations and interpretations based on the 2010 survey results:

- Based on common features observed in the four lines, both the chargeability and resistivity showed weak to strong chargeability responses and low to high resistivity distribution.
- A major difference in the direct current/induced polarization and audio-magnetotelluric signatures between the northeast, central and southwestern regions of the survey lines was observed. The highest conductivity was observed from near surface to approximately 100 metres depth in both direct current and audio-magnetotelluric resistivity models. The conductive cap was found above a thick, highly resistive body in the central part of the grid. The central part is relatively more resistive, which potentially depicted the mineralization of interest having gold traces. Drill data provided by Claude Resources confirmed the presence of gold traces related to high resistivity in audio-magnetotelluric sections and at gradient zone of direct current resistivity sections where resistivity changed in nearly two orders of magnitude.

- It is possible that the direct current and audio-magnetotelluric inversions could be affected by 3D signatures of linear structures which may run parallel and/or sub-parallel to the survey lines. The observed high resistivity contrast in direct current and audio-magnetotelluric inversion models potentially defines the geological structures, lithological units and alteration zones which may be related to gold mineralization.
- Low chargeability responses were generally observed from near surface to approximately 100 metres depth and associated with the conductive cap. The northeastern part of the lines represents high chargeability from near surface to a greater depth than the rest of the grid, and may be associated with a geological contact and/or fault zone.
- Below the low chargeability top layer, the central part of the grid shows moderate chargeability associated with high resistivity potentially consisting of the mineralization of interest. Drilling data provided by Claude Resources confirmed the presence of gold traces related to moderate chargeability. The change in chargeability between the northeast and central areas may describe the alteration zone related to gold mineralization.
- The geological setting of the region giving rise to a variety of geophysical responses for possible mineralization, and the inversion results of the direct current/induced polarization and audio-magnetotelluric models along with drilling data, confirmed that the gold deposit in this area is structurally controlled and dominated at gradient zones.

9.2.3 Airborne Magnetic and Radiometric Survey 2016

SSR Mining contracted Precision GeoSurveys Inc. (Precision) to complete a high resolution airborne magnetic and radiometric survey over the most recently staked portion of the Seabee Gold Operation land package from August 30 to September 4, 2016 (Precision 2016). The survey block covered an area of 22.9 kilometres by 15.0 kilometres and included 150 survey lines and 25 tie lines that totaled 1,815-line kilometres. Survey lines were spaced 100 metres in an east-west orientation and tie lines were spaced 1,000 metres in a north-south orientation. Nominal terrain clearance was specified at 75 metres.

Selected suspect anomalies were re-flown for confirmation, specifically those found on a single flight line. Lines to be re-flown were a minimum of 2,000 metres long, so that survey line re-flights crossed at least two tie lines and tie line re-flights crossed at least five survey lines.

Survey overview maps (flight lines and digital terrain model), magnetic maps (total magnetic intensity, residual magnetic intensity and calculated vertical gradient of the residual magnetic intensity), and radiometric maps were produced by Precision, with the objective of identifying potential new targets for gold mineralization on the Seabee property.

The magnetic data was collected to better observe the structural nature of the underlying bedrock and, where possible, determine major breaks in the regional stratigraphy along which shear zones can propagate, and the radiometric data was used to determine the relative amounts of uranium, thorium and potassium in the surficial rocks and soils to be used for the mapping of bedrock lithology, alteration and structure. The resultant data were found to be consistent with the structure of the bedrock and major lithological breaks previously interpreted by geological mapping, air photo interpretation and drilling. The data was also consistent with the two-dimensional structural architecture and intensity of previously flown surveys within juxtaposed survey blocks.

10 Drilling

Prior to SSR Mining's acquisition of the Seabee Gold Operation, and as at December 31, 2015, a total of 2,037 surface boreholes totaling approximately 389,281 metres and 4,818 underground boreholes totaling approximately 861,514 metres had been completed on the property.

For the year ended December 31, 2016, an additional 51 surface boreholes totaling approximately 19,817 metres and 306 underground boreholes totaling approximately 65,021 metres were completed on the property.

Exploration surface drilling and infill surface and underground drilling completed by SSR Mining on the Seabee Gold Operation up to the end of the second quarter of 2017 has been executed in the Carruthers, Herb Lake, Porky Main, Porky West, Seabee, and Santoy areas, where 55,590 metres have been drilled from 130 boreholes.

Table 4 summarizes the drilling completed on the property. Figure 11 displays the surface boreholes completed on the property. Details regarding the salient drill programs are discussed in greater detail in the subsections below.

Table 4: Surface and Underground Drilling Completed on the Seabee Gold Operation to End of Q2 2017

Drilling Program	Company	No. Surface Boreholes	Surface Metres Drilled	No. Underground Boreholes	Underground Metres Drilled	Total Boreholes	Total Metres
1947 - 1988	Various (Cominco, Claude Resources, Placer)	278	35,419	77	6,491	355	41,910
1989 - 2012	Claude Resources	1,742	344,415	4,190	724,858	5,932	1,069,273
2013 - 2015	Claude Resources	17	9,447	551	130,165	568	139,612
2016	Claude Resources / SSR Mining	51	19,817	306	65,021	357	84,838
2017	SSR Mining	46	22,751	84	32,939	130	55,690
Total		2,134	431,849	5,208	959,474	7,342	1,391,323

10.1 Drilling by Cominco, Claude Resources, and Placer 1947 – 1988

Cominco identified four gold-bearing zones on the Seabee Gold Operation property between 1947 and 1950, after drilling 79 boreholes totaling 4,414 metres, and in 1961 drilled two shallow holes of 41 metres as part of an overall review of the known property data. In 1974, Cominco drill tested additional vein structures with 16 boreholes totaling 458 metres, and commenced further exploration from 1982 to 1983 whereby 20 boreholes were drilled totaling 3,776 metres. This drill program was not completed before Cominco sold the property in 1983.

Upon acquisition of the property, Claude Resources drilled three boreholes totaling 226 metres to corroborate Cominco's work and property estimates. Pursuant to an option agreement with Claude Resources, Placer executed an extensive surface and underground drilling program from June 1985 to June 1988, whereby a total of 95 surface boreholes and 72 underground boreholes were

completed. Placer determined the property did not meet its criteria for development and returned the property to Claude Resources in 1988.

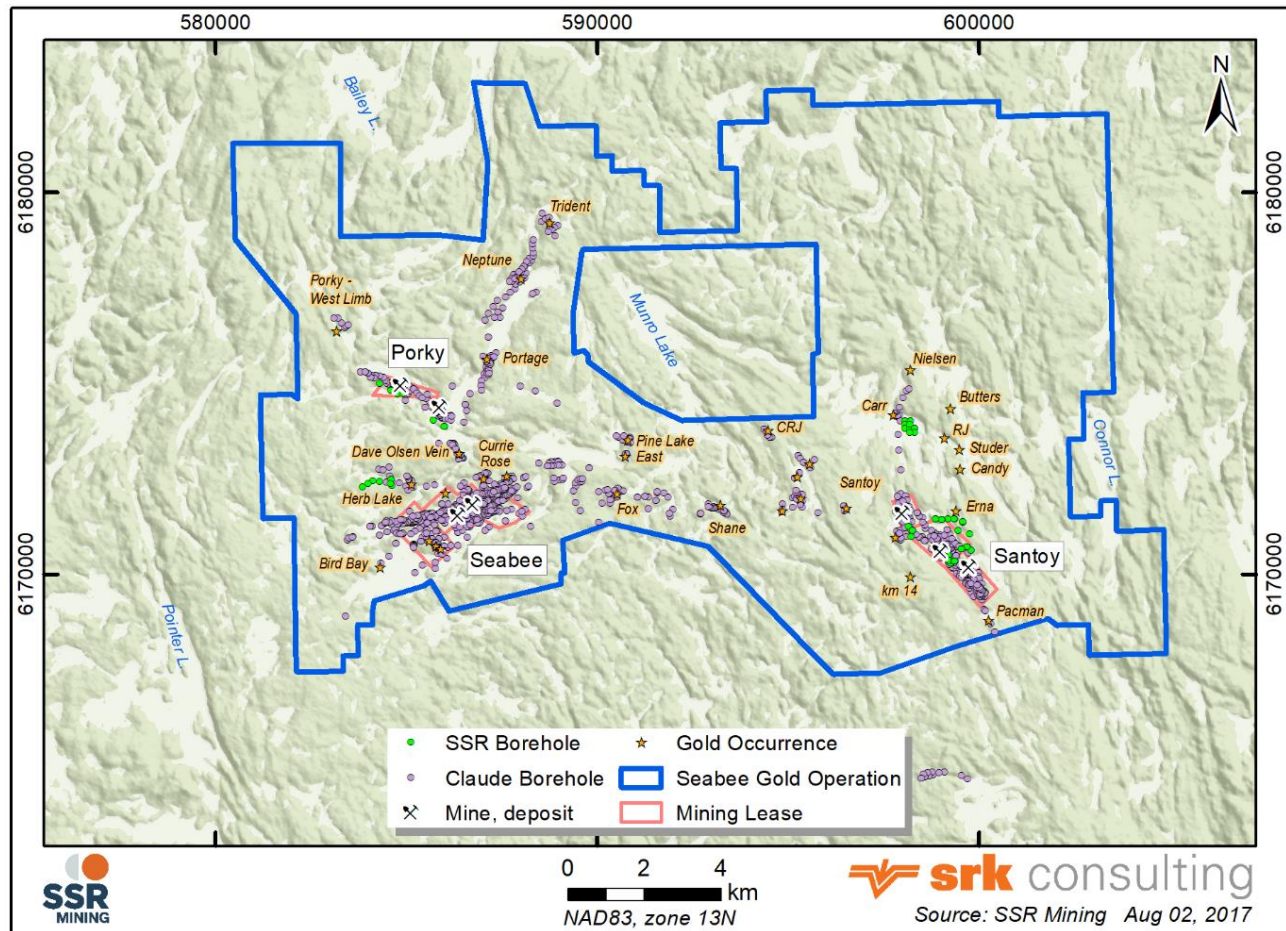


Figure 11: Map Showing the Distribution of Surface Drilling in Relation to the Seabee, Santoy and Porky Deposits, and Other Known Gold Occurrences on the Seabee Property.

10.2 Drilling by Claude Resources 1989 – 2015

10.2.1 Seabee Area

After obtaining a 100 percent interest in the Currie Rose property from Currie Rose Resources Inc. in 1994, which consisted of over 4,000 hectares surrounding the Seabee mine, Claude Resources conducted a drilling program to test gold-bearing structures identified the previous year during a prospecting program. The drill program consisted of 27 boreholes totaling 3,458 metres. In 1996, drilling defined the 10 zone, identified the previous year and found adjacent to the western boundary of the Seabee mine. A total of 23 boreholes were drilled totalling 2,567 metres. Diamond drilling in 1997 explored the vein extensions of the 10 vein and 2C vein structures with seven boreholes totaling 1,573 metres. The 1999 drill program focused on an area southwest of the Seabee mine trend and consisted of 7,726 metres drilled in 47 boreholes.

As follow-up, the majority of boreholes in 2000 were collared to the west of mining lease ML 5520 in the Bird Lake area, to explore for mineralized structures parallel to the Seabee 2 vein. Targets in

the Porky Lake and Pine Lake areas were also tested. Six additional remote targets, namely the Scoop, Porky, Herb, Pine, East and West Bird Lakes were explored in 2001, with anomalous gold values encountered within variably sheared host rocks.

In 2002, drilling focused on a laterally extensive geochemical soil anomaly on the west shore of Porky Lake, and on a series of quartz-bearing shear structures north and east of the No. 5 ramp access. The drill program successfully discovered the Porky West zone, and produced elevated gold values over narrow widths at the No. 5 ramp access.

Drilling in 2003 in the Porky area discovered the Porky West zone, an arenite-hosted high-grade gold lens. Subsequent drilling in 2004 focused on delineation drilling at the Porky Main and Porky West zones, and exploration drilling on the eastern limb of the Porky Lake anticline targeted the contact between the mafic metavolcanics rocks and feldspathic arenite.

A small diamond drill program was completed in 2009, which extended the down plunge extent of the Porky West ore shoots.

Evaluation of the Neptune target, located approximately 6 kilometres north of the Seabee mine, was the focus of exploration in 2010, where drill testing included two boreholes. Exploration efforts in 2011 included a further 28 boreholes to test the 1.8-kilometre strike length of the soil anomaly to vertical depths of up to 250 metres, and in 2012, further drilling at the Neptune target confirmed the sporadic nature of the gold-bearing system.

10.2.2 Santoy Area

Prospecting and geological mapping in 1998 resulted in the discovery of numerous new veins in the Santoy area. The targets were drill tested in 2002 with encouraging results, and became the focus of additional exploration programs leading to the discovery of the Santoy 7, and Santoy 8 and Santoy 8 East deposits in 2004 and 2005. In 2004, five boreholes totaling 598 metres were drilled at Santoy 6, 48 boreholes totaling 6,164 metres were drilled at Santoy 7, and 21 boreholes totaling 2,797 metres were drilled at Santoy 8. Drilling of the Santoy 8 and Santoy 8 East zones in 2005 was aimed at testing the north-northwest plunge and dip extensions of the mineralized shear structures outlined in previous drill programs. Sixty-eight boreholes totaling 15,296 metres were drilled, with an additional 20 boreholes totaling 6,272 metres drilled in the summer of 2005. Infill drilling continued in 2007 to collect information for proposed mine plans with 25-metre infill data to a depth of 250 metres completed on the Santoy 8 and Santoy 8 East deposits. A total of 31,670 metres was drilled from 147 boreholes.

Exploration drilling in 2010 targeted the Santoy Gap area to test the Santoy shear system between the Santoy 7 and Santoy 8 deposits, as well as to continue to investigate the down plunge continuity of the Santoy 8 and Santoy 8 East deposits. Results from the program outlined continuity at depth for both the Santoy 8 and Santoy 8 East deposit.

Drilling defined the Santoy Gap deposit in 2011. Multiple high-grade intervals were intercepted, expanding the strike length and width of the known mineralization. During 2012, exploration focused on defining the relationship between the Santoy Gap and Santoy 8 deposits to depths up to 750 metres. Infill and exploration drilling around the Santoy Gap lens and Santoy Shear zone continued to confirm and expand the Santoy Gap system, and also identified a sub-parallel lens approximately 150 metres to the east of the Santoy Gap deposit.

In 2013, surface drilling programs targeted the down plunge extension of the Santoy Gap and Santoy 8 deposits, resulting in two out of three step-out boreholes returning high grade gold intercepts. The

Santoy Gap system was extended down plunge to 650 metres depth and the Santoy 8 deposit was extended 400 metres below the base of the previously estimated Inferred Mineral Resource.

Underground drilling in 2014 focused on defining and expanding the Mineral Reserve and Mineral Resource at the Santoy Gap deposit. Results identified high grade and promising widths of gold mineralization hosted within three vein systems, named the Santoy Gap 9A, 9B and 9C deposits. Additional underground drilling in 2015 focused on the expansion of Mineral Reserve and Mineral Resource at the Santoy Gap deposit, and a 6,000-metre drill program targeted the plunge continuity of the Santoy 8 deposit. Results from the Santoy Gap up-dip drilling demonstrated the potential for expansion of the deposit, and drilling results within, down-dip and down plunge also increased confidence in the continuity of the deposit at depth.

10.3 Drilling by Claude Resources and SSR Mining 2016

Drilling in 2016 on the Seabee Gold Operation property had the objective of increasing and converting the Mineral Resource to Mineral Reserve.

An underground diamond drilling program to upgrade the Inferred Mineral Resource and explore the extension of the Santoy 8A and Santoy Gap deposits was completed by SSR Mining. From surface, drilling was conducted to upgrade the up-plunge extension of the Santoy Gap 9A, 9B and 9C deposits as well as to complete deeper infill drilling on the Santoy 8A Inferred Mineral Resource.

At the Seabee mine, five boreholes were completed on the 15 Vein target, an offset mineralized structure along the 19 Shear. At the Carr target, located 4 kilometres along strike to the north of the Santoy mine, SSR Mining drilled nine boreholes over a 2-kilometre strike length, totaling approximately 2,500 metres. At the Herb West target, located 2.2 kilometres west-northwest of the Seabee mine, four boreholes totaling approximately 1,130 metres were completed. Results from drilling the above targets revealed shear-hosted quartz-veining structures with gold-bearing sulphide mineralization, and warranted follow-up drilling.

10.4 SSR Mining Drilling Procedures

10.4.1 Underground Drilling Procedures

The most important dataset informing the current Mineral Resource at the Seabee Gold Operation is derived from underground drilling. Underground drill layouts are created using GEMS three-dimensional software. Three dimensional lines are created between a desired pierce point and a collar location for each planned borehole. The resulting azimuths from the developed borehole traces are given to the survey department as a digital plan map, which is then uploaded into the Mine Markup tablet. All underground drill layouts are created in mine grid coordinates. The survey crew then goes underground to physically paint the drill lines of all boreholes on the excavation walls by means of numbered lines, with front sight and back sight marked accordingly. Spads are drilled into the lines with which the line number and azimuth are marked on flagging tape in the event the painted lines become obscured or illegible over time.

Underground drills are equipped with laser sighting systems for accurate alignment on the specified drill line. Dips are set using digital inclinometers magnetically attached on the drill's feed frame. Completed boreholes are surveyed using a Reflex multi-shot tool and wireless palm unit to measure the azimuth, dip and total magnetic field. Boreholes are surveyed at 10-metre intervals from the bottom of the borehole to the collar. For boreholes exceeding 500 metres, it is common practice to take single shots every 30 to 50 metres as the borehole advances to ensure that deviation is within

acceptable ranges. Stored data is transferred to a memory stick from the palm unit, and is then uploaded into a program called S-Process where the data is visually verified, and then transferred into the GEMS Access database as a .csv file. Upon borehole completion, the collar locations and azimuths are recorded by mine surveyors and the data is transferred to the drill geologist as a .csv file for inclusion into the GEMS survey field in the Access database. Completed boreholes are checked against planned borehole traces to verify that they are spatially correct in the three-dimensional model.

Underground drill logging takes place at the drill chamber underground. Data from logging is captured on paper log sheets and include header data containing the borehole identification number, date, the logging geologist's name and planned borehole directional data. The main body of the log contains row and column fields for depth intervals, lithological descriptions, sample numbers, assay results and rock quality data measurements. Upon completion of logging, the information is manually entered into the GEMS database by a mine geologist. Completed drill logs are placed in a file folder for future verification by the senior mine geologist before inclusion into resource updates. Completed assay data is housed in an excel database owned by the Seabee mine laboratory. The geology department has read only access to this file and can copy and paste results into the GEMS database. Underground chip and muck sample data is recorded in a sample tag book and later manually entered into the Chips Access data base by the mine geologist, which is updated with assay results as they are made available in the laboratory excel database.

10.4.2 Surface Exploration Drilling Procedures

Upon establishing drill targets, three-dimensional points representing surface borehole locations are created in GeoSoft and Leapfrog software. Borehole traces are planned to pierce the target as close to orthogonal as possible to obtain a true thickness of the stratigraphy. After the anticipated borehole deviation is accounted for and an optimal trace is obtained, the surface location is inspected to ensure suitability. In the field, borehole collar locations and two front sights are recorded with a handheld GPS prior to data being entered into the Access-based Core Logger software.

Reflex multi-shot device tests record the borehole's azimuth, plunge, roll, magnetic intensity and temperature. Tests are completed at 100 metre intervals during down-hole drilling and are collected every 30 metres upon completion of the hole as rods are being pulled. The data are collected via a handheld device that syncs to the Reflex tool down-hole, and are recorded onto Reflex paper sheets. The paper sheet and digital data are delivered to the supervising exploration geologist, and are downloaded and input into GeoSoft to track the borehole progression, ensuring that unexpected and/or excessive deviation has not occurred.

Once a hole has been completed an aluminium plug is placed approximately 10 metres downhole from the base of the casing and the hole is cemented to the top. An aluminium cap is stamped with the borehole number and a flag erected so that hole can be easily located in summer or winter. The Seabee Gold Operation mine survey team then takes a DGPS waypoint of the collar location with the base station for final verification of its location, providing accuracy within 0.3 metres of the hole location. The digital data is sent to the supervising exploration geologist and the final three-dimensional coordinates of the borehole are entered into Core Logger and GeoSoft.

Core is transported to the core logging facility where it is marked and logged. Data from individual drill programs is captured in an Access database, including drillhole collar and header information, detailed descriptions of lithological units, structures, alteration and mineralization, core recovery and RQD data, and sample information. Photographs of core are taken both wet and dry, and digital copies are archived. Upon receiving laboratory results and confirming quality control results, the

entire dataset is combined into a master Access database and incorporated into the GeoSoft database. Core boxes are stacked and stored at the Seabee Gold Operation core storage yard.

10.5 Chip and Muck Proxy Boreholes

Most of the informing assay data for the Mineral Resource present at the Seabee Gold Operation have been derived from underground diamond drill samples and production sampling since 2010. All drill assay results are recorded in a Geovia GEMS 6.6 project. Samples informing the resource are chosen by selecting intervals within a mineralized wireframe created by a geologist within GEMS. Chip and muck assay data is compiled in an Access database which can be queried by sill and easting. Each sill is divided into 25-metre segments at the discretion of the geologist. The database is then queried within each 25-metre segment and a length weighted average of all the muck and chip assays within the interval is presented as an average grade. To incorporate this queried grade into GEMS, a geologist creates an entry in the drilling workspace effectively making a proxy borehole located at the midpoint of the queried interval. The length of the proxy borehole is determined by the width of the sill, as measured from solids within GEMS created by modelling survey data, at the midpoint of the 25-metre query window. The orientation of the proxy borehole is parallel to the back of the sill and perpendicular to strike of the orebody. The grade of the proxy borehole is set as the queried value as a single assay interval, the length of which equals the length of the proxy borehole.

10.6 Drill Sampling

10.6.1 Sampling by Previous Operators 1949 – 2009

Generally, historic sampling on the Seabee Gold Operation was conducted by a geologist selecting mineralized intervals based on visual inspection of drill core. Selected intervals were split by hydraulic or manual power splitter and sent for analyses at the on-site laboratory or an offsite laboratory.

Information regarding historic sample preparation and analyses is incomplete or unavailable, and is therefore not discussed in detail in this Report. Multiple sampling methods are attributed to individual drilling campaigns without differentiation of the method applied to each borehole. Furthermore, drilling prior to 2009 tends only to have dip surveys and no control on azimuth, and is therefore unreliable.

Current Mineral Resource and Mineral Reserve estimates at the Seabee Gold Operation are informed almost entirely by drilling post-2009, excluding the Mineral Resources attributed to the Porky West deposit. The historic sample preparation and analyses therefore does not have a significant material impact on the property.

10.6.2 Drill Core Sampling by Claude Resources and SSR Mining 2009 – 2017

Drill core is logged in detail on site by SSR Mining geologists. Rock quality and core recovery are documented, zones of potential mineralization are marked for sampling, and three to five samples are marked in both the hanging and foot walls.

Surface diamond drill core samples are chosen based on geology and average 1.0 to 1.5 metres in width, with 0.3-metre width samples taken for geological interpretation purposes. The sampling interval was established by minimum or maximum sampling lengths, and geological and/or structural criteria, and are no less than 0.10 metres. Discrete intervals of mineralized or prospective lithologies which measure more than 0.10 metres and less than 1.0 metre may be sampled as a single

sample. Mineralized or prospective lithologies which are greater than 1.0 metre in width tend to be broken into one metre sample intervals internal to the interval of interest. Intervals immediately adjacent to mineralized or prospective lithologies are sampled, at a minimum, 1.0 metre from the contact with the prospective mineralogy. Sampling of less prospective, or weakly altered lithologies, may be sampled at 1.5- to 2.0-metre intervals at the discretion of the logging geologist. Intervals deemed un-prospective for gold mineralization by the geologist are sampled using a composite sample, not exceeding 8.0 metres in length. The composite sample consists of no less than one 10-centimetre piece of core selected per 1.5 metres in the total eight metre sample interval. The composite sample is used to ensure that mineralized zones not immediately recognized by the geologist are not missed. If a composite sample grades more than 0.10 gram of gold per tonne (g/t gold), then the interval is re-logged and re-sampled at a one metre sample interval to determine the source of the anomalous gold grade. Field geologists are trained to sample additional intervals which may have associated gold mineralization, such as zones of increased sulphide mineral content or quartz veining not previously associated with a known mineralized zone. Sample intervals are recorded in an Access database, and photographs of each core box are taken. Certified reference material, blanks or duplicate samples are inserted into the sample stream at regular intervals of at least one per every 20 samples.

After the drill core is logged and marked for assay it is transferred to the core splitting facility, where the selected intervals are sawed lengthwise. The half core to be analyzed is double-bagged, sealed and labeled with coded security tags, while the other half remains in the core box as a record. In the case of duplicate samples or re-sampling, core is sawn in quarters and a quarter core is retained as a record. Some core intervals are destroyed in metallurgical testing, and are marked by survey stakes with metal labels in the core boxes from which the interval is removed from. Samples to be sent for analyses are placed in white rice bags, weighed and closed with a uniquely coded security zip tie. Sample submittal forms are sent to the appropriate laboratory indicating the number of samples, weight and security tag numbers of each sample in the shipment. This data is verified by the laboratory when the shipment is received, and any broken tags or sample bags that appear to have been tampered with are reported.

Underground core is logged by geologists in the underground drill chamber. Sample intervals are selected by the logging geologist and measure no less than 0.10 metre. Discrete intervals of mineralized or prospective lithologies which measure more than 0.10 metre and less than 1.0 metre may be taken as a single sample. Mineralized or prospective lithologies which are greater than 1.0 metre in width are typically divided into one metre sample intervals internal to the interval of interest. Intervals immediately adjacent to mineralized or prospective lithologies are sampled, at a minimum, 1.0 metre from the contact with the prospective mineralogy. Less prospective, or weakly altered lithologies may be sampled at 1.5- to 2.0-metre intervals at the discretion of the logging geologist. No samples are taken of core considered to be un-mineralized by the geologist. Sample intervals are recorded on paper logs and later transcribed by hand into a GEMS project database. Certified reference material is inserted at a rate of one in 20 samples.

Once the intervals to be sampled are selected, the whole core is placed in a sample bag with a uniquely numbered identification tag and delivered to the Seabee laboratory for analyses. Un-sampled core is dumped near the drill chamber and used as fill in the mine.

Unauthorized personnel are not permitted access to the drill machines or the core logging and core splitting facilities.

10.6.3 Underground Chip and Muck Sampling

Production samples, both chip and muck, are currently used in the Mineral Resource estimation process. Chip samples are collected by a geologist at the working face; the hangingwall to footwall is sampled, with intervals divided based on lithological boundaries and not exceeding 1.5 metres in width. Wall rock is also included in this sample type, as it is primarily used as a daily estimate of grade being delivered to the mill. Muck samples are obtained by the geologist when they are unable to reach the working face in a heading. These samples consist of grabs of muck on the floor of the drift, with no less than three muck samples taken at a face unless extenuating circumstances requires fewer samples. Chip samples retain their specific width weighting, while muck samples are assigned a proxy interval based on the number of samples collected and the width of the sill from which the samples are collected. The samples are bagged, tagged with a unique identifying number and transported to the Seabee laboratory for analyses following the methodology described in the previous section. Assay values are tracked in an Access database.

10.7 Specific Gravity Data

Specific gravity (SG) was collected from NQ diameter drill core during the 2011 Santoy Gap drilling program by the Seabee exploration department. Half core was weighed within mineralized zones, while whole core was weighed within waste domains. A total of 433 SG measurements were collected from 45 different boreholes. Analyses were performed on site by water displacement using the following methodology:

- Place a dry glass vessel on a balance and zero the weight;
- Collect a 20 to 25 centimetre piece of half core or whole core from the interval of interest and place into the vessel;
- Record the weight of the core, and zero the balance;
- Fill the vessel to marked line with cold water; and
- Suspend core in water and weigh the vessel with the water and core.

The difference between the original water weight and the second reading is equal to the volume of water displaced by the core, from which the SG was calculated using the original weight of the core sample. From this data, an average SG value was calculated based on lithology.

Since mid-2014, the Seabee mill has been performing a daily SG determination from an approximately five-kilogram 24-hour composite sample collected from the belt. The samples are analyzed on site by water displacement using the following methodology:

- Riffle composite sample down to an approximately one-kilogram representative sample;
- Place a dry flask on a 200-gram balance and zero the weight;
- Add sample to the flask (greater than 55 grams);
- Record the weight of the sample, and zero the balance;
- Fill the flask to marked line with cold water and ensure outside of flask is dry; and
- Place the flask back on the balance and record the weight.

Two 200-millilitre flasks have been labeled by SSR Mining staff with the water weight when filled to a specified line to be used for the original water weight. The difference between the original water weight and the second reading is equal to the volume of water displaced by the sample, from which the SG is calculated using the original weight of the dry sample.

10.8 SRK Comments

SRK is of the opinion that the drilling and sampling procedures adopted by the Seabee Gold Operation are consistent with generally recognized industry best practices. The resultant drilling pattern is sufficiently dense to interpret the geometry and the boundaries of gold mineralization with confidence. The core samples were collected by competent personnel using procedures meeting generally accepted industry best practices. The process was undertaken or supervised by suitably qualified geologists. SRK concludes that the samples are representative of the source materials and there is no evidence that the sampling process introduced a bias.

11 Sample Preparation, Analyses, and Security

11.1 Historical Samples

The borehole sampling preparation, analyses, and security procedures applied prior to 1989 have not been documented in detail.

11.2 Core Samples (1989 to present)

Drill core is monitored by SSR Mining staff from the time it is taken out of the ground until it is split and the samples are delivered to the laboratory. Unauthorized personnel are not permitted access to the drill machines or the core logging and splitting facility. Samples that are split for assaying are double-bagged within the splitting facility and identified with a coded security tag. Upon receipt of samples at the laboratory, any sample tags that are broken or any sample bags that appear to have been tampered with are reported to SSR Mining.

All underground samples are assayed at the non-accredited Seabee Gold Operation laboratory. Samples are dried for 30 to 60 minutes, crushed to 10 mesh, and riffle split using a Jones splitter until only 200 grams of material remains. The samples are then pulverized in a ring and puck pulveriser until greater than 80 percent passes through a 200-mesh screen. Thirty grams of pulp material is then analyzed for gold by fire assay with gravimetric finish using a 0.01 g/t gold detection limit.

Most surface drilling samples are assayed at TSL Laboratories Inc. (TSL) in Saskatoon, Saskatchewan. TSL is independent of SSR Mining. The laboratory was ISO/IEC 17025 accredited until April 18, 2017, and has since withdrawn from the Standard Council of Canada's system. TSL informed SRK that their internal procedures and methods remain the same, and that they still participate in CANMET round robin testing as well as various other lab comparison programs.

Upon receipt of samples, TSL attaches a bar code label to the original sample bag, and the label is scanned to record the sample weight, date, time, equipment used and operator name, allowing for complete traceability of each samples during the laboratory process. Samples are crushed to 70 percent passing 10 mesh in two stages. The crushed reject is homogenized by passing it once through a Jones riffle splitter down to 250 grams and then recombining the two halves, from which 250 grams are split using the same riffle splitter. The split is then ring pulverized to 95 percent passing 200 mesh. Samples are analyzed for gold by 30-gram fire assay with gravimetric finish using a 0.03 g/t gold detection limit. Pulps and rejects are stored in containers on the TSL laboratory property. TSL employs comprehensive quality assurance and quality control protocol and control charts for standards assayed at the laboratory show routine performance within two standard deviations of the certified value. The relative precision for gold meets contract specifications and established limits.

11.3 Chip and Muck Samples

Chip and muck samples are bagged, tagged with a unique identification number and transported to the Seabee Gold Operation laboratory for analysis following the same methodology as described in Section 11.2.

11.4 Quality Assurance and Quality Control Programs

In 2006, the Seabee Gold Operation geology department introduced an analytical quality assurance and quality control program to verify the accuracy of its internal, non-accredited assay laboratory. The program has since been adopted and modified by SSR Mining and involves the insertion of certified reference materials (CRM), duplicate assays, and monthly umpire check assays at an external certified laboratory.

A Rocklabs Ltd. (Rocklabs) CRM is inserted by a mine geologist at a frequency of one per 20 samples, regardless of the sample type. Three distinct CRM samples are typically cycled through the process; one low grade, one average grade and one high grade. The mine geologist records the identification numbers of the CRM samples introduced into the assay stream, and checks them as a pass or fail upon receipt of laboratory results. Assay batches with failed CRM results are re-analysed. CRM results are recorded digitally in a spreadsheet provided by Rocklabs to track the pass and fail rates of each of the various reference materials used. The results are compiled in a monthly report and shared with the relevant departments involved in the process.

On a monthly basis, an average of 20 pulp samples are submitted for external analyses by TSL in Saskatoon, Saskatchewan. One CRM is included in each batch of external check samples, and a sieve analysis is performed on one of the pulps to determine percentages passing through -150 and -200 mesh. Results from the analyses at TSL are compared to the on-site results and included in a monthly report.

A blank sample of a coarse-grained quartz rich rock is inserted after every sample containing visible gold, and pulp duplicates are run every tenth sample by the laboratory. According to SSR Mining, blanks were used and recorded from 2010 to 2014.

SSR Mining reviews the results from the above control samples to accept the data from each individual batch or to reject the data and request a re-run. A batch is rejected if the result for the standard exceeds the tolerance of the 95 percent confidence level stated on the standard's certificate. The failure trigger for pulp duplicates is less defined due to the lode-gold nature of the mineralization; however, batches are considered for re-run when duplicate assay values are greater than ± 10 percent. With respect to coarse-grained blanks, sample batches are rejected if the result is greater than three times the detection limit of the laboratory.

11.5 SRK Comments

In the opinion of SRK, the sampling preparation, security and analytical procedures used by SSR Mining are consistent with generally accepted industry best practices and are therefore adequate to support Mineral Resource estimation.

12 Data Verification

12.1 Verifications by SSR Mining

All exploration and production procedures undertaken by SSR Mining follow detailed procedures and exploration and production data are verified prior to consideration for geological modelling and Mineral Resource estimation. Experienced mine geologists implement industry standard measures to ensure the reliability and trustworthiness of data.

SSR Mining closely monitors analytical quality control data, and upon receipt of results from the lab confirm that sample batches have either passed or failed. Quality control failures are investigated, and failing batches are requested for re-assaying. In addition, monthly check assays are sent for external analysis at TSL and compared to the on-site results. Monthly reports are compiled outlining the performance of analytical quality control data and distributed amongst departments involved in the process.

In 2016, SSR Mining commissioned Ron Konst, an independent quality assurance and quality control consultant, to review the exploration and mine geology department databases at the Seabee Gold Operation. The mine databases encompassed the period 2004 to 2017, whereas the exploration review involved the 2016 database only.

In early 2016, 585 pulp duplicates from the mine database were evaluated from randomly chosen samples, representative of the Santoy deposit. The following assay audit observations were made (Konst 2016a):

- Of the matched pairs, 60 outliers (ten percent) were identified to exhibit significant nugget effect. Outliers were defined as matched pairs with a grade difference over 0.1 g/t gold and greater than 100 percent precision, and those with a grade difference over 0.5 g/t gold and greater than 25 percent precision.
- A total of 102 of the second pulp analyses returned higher assay values, 116 returned lower assay values, and 367 returned the same value. Of the matched pairs, the original gold analyses had a mean gold grade of 2.19 g/t gold while the second pulp returned a mean value of 2.51 g/t gold, a 13.4 percent difference.
- A total of 223 matched pairs above the lower reporting limit were considered suitable for precision evaluation. Calculated precision, including outliers, was 24 percent at a cut-off grade of 3.0 g/t gold and 23 percent at a cut-off grade of 5.0 g/t gold.
- The evaluation indicated likely issues with gold grain size for the analytical method used. The more erratic higher grade matched pairs represented 27 percent of the pulp duplicates reporting above the lower detection limit, and represented approximately 35 percent of the gold contained within the matched pair sample set. Improvements to the analytical method, in the form of screen-metallic assays, was suggested.
- Due to analytical precision deficiencies, drilling, sampling, and preparation precision were recommended to be examined to quantify their impact on grade estimation within the Seabee deposit.

A total of 54 screen metallic assay results were chosen, based on grade, from the 585 pulp duplicates for evaluation. Konst (2016b) concluded the following from his investigation:

- Evaluation of the screen fire assay results confirmed the presence of significant coarse gold in the selected samples and highlighted its potential impact on grade estimation. The percentage of contained metal present as coarse gold could not be quantified as details were lacking regarding the screen fire assay determinations.
- Samples were selected based on having original average grades greater than 5.0 g/t gold, forming a selection bias. Samples that returned low initial grades, but that may have contained un-assayed nuggets of coarse gold that would have been picked up in a screen fire assay, were excluded. This bias exaggerates the apparent impact that coarse gold may have on the deposit as a whole, and a direct comparison of mean gold grades suggested that the original gold grades were overestimated by 23 percent.
- Based on pulp duplicates alone, the analytical precision well above detection was 15 percent. Subtracting it from the pulp-duplicate and screen fire assay precision of 31 percent indicated that the overall bias between the two datasets was closer to 16 percent, exaggerating grade by 16 percent. This, however, is not indicative of the exploration assay data because nugget samples, which reported below their true grade, were not selected for analysis in the screen fire assay study.
- A comprehensive screen fire assay program was recommended for zones of interest to provide an accurate determination of gold content in deposits of this nature.
- Gold grain size analyses would assist in determining screen size for future screen fire assays, and given the coarse nature of gold in the deposit, it was recommended to use a rigorous multi-subsample “no-roll” method of selecting aliquots from pulps and minus fractions for assay.

An audit of drilling and assay data indicated poor precision was noted (23 percent at 5.0 g/t gold and a detection limit of 0.1 g/t gold), but was assumed to have negligible impact on Mineral Resource estimates due to the abrupt nature of the mineralization boundaries. Significant re-tooling steps were not deemed necessary, however low-cost steps to improve assay precision, and additional recommendations aimed at improving overall assay and survey accuracy, process efficiencies, and auditability were made.

A portion of the database was compared to the source information to understand the nature and frequency of database errors. Disagreement between surveyed collar azimuths and downhole magnetic surveys of six boreholes, and significant disagreements between high grade assays and re-runs were the most notable issues identified and are described as follows (Konst 2016c):

- Variations in azimuth, ranging from two to 16 degrees, were observed when corrected FlexIT survey .csv files were compared to GEMS database exports of downhole surveys, implying a possible counter-clockwise rotation of the local magnetic field due to local concentrations of magnetic minerals. A non-magnetic survey was recommended where historic boreholes could be re-surveyed.
- A total of 204 assay results from mine geology drill core and quality assurance/quality control samples were randomly selected from mine lab worksheets dated February, March, May, and June 2016 and compared to an August 2016 GEMS database export of assay results. Two high grade assay re-runs returned nil values, which is what resides in the current database. The errors affect only one percent of the test data, but amount to a simple average grade for the GEMS dataset that is 20 percent lower than the original laboratory results. A lack of documentation made it unclear as to which results, or combination of results, should be deemed correct and included in the database, and it was recommended that

assays greater than 60.0 g/t gold be reviewed to ensure all relevant assay data is included in the final assay database.

- An addendum to the original Seabee mine site drilling and assay audit involved the inclusion of exploration collar survey data from six randomly selected Santoy boreholes. Variations between the final database and original azimuth ranging from 7.6 to -2.8 degrees reinforced the recommendation that non-magnetic surveys be executed where historic boreholes are available for re-survey.

Konst (2016d) also conducted a review of the sampling, preparation, and analytical quality assurance of the 2016 Seabee exploration program and made the following recommendations:

- Blanks were submitted as pre-prepared pulps. It was recommended that barren half-core be used instead, and inserted following mineralized samples to properly test for contamination during the sample preparation process.
- CRM analysed at TSL were submitted at a frequency of one in 40, however samples were assayed in batches of 20, meaning that only half of the analytical batches were controlled for accuracy. The insertion rate of quality control standards was recommended to be increased to one in 20 to test all analytical batches.
- Improvements in grind quality control at the Seabee mine was highlighted, as TSL's analytical precision was observed to be significantly better.
- A lack of sufficient data to quantify prep precision and sampling precision, and how it varies with grade, was identified. Crush duplicates to quantify prep precision were recommended to be incorporated into the Seabee quality assurance protocol, and half-core field duplicates over quarter-core were recommended to provide a true measure of sampling precision;
- A comparison of analytical methods indicated that results by fire assay with a gravimetric finish be given priority over fire assay with an atomic absorption spectrometry finish.
- TSL's greater than 5.0 g/t gold protocol for selecting screen metal assay samples has a selection bias. A site driven protocol such as selecting zones containing visible gold was recommended.

An evaluation of 240 umpire pulp duplicates provided as matched pairs of Seabee mine data from January to November 2016 and January 2017 was performed. The matched pairs were created by taking a second random selection of pulp material from Seabee mine pulp samples, and sending them to TSL for check analysis. A total of 238 matched pairs returned results above the reported lower detection limit of 0.03 g/t gold, and were therefore suitable for precision analysis. The following observations and recommendations were made by Konst (2017):

- Only one (nine percent) of the 11 samples sieve tested passed the 95 percent passing 150 mesh pulverization specifications. The remaining 10 reported over 80 percent passing 150 mesh. It was recommended that the mine laboratory increase its efforts to meet grind specifications.
- The 2016 calculated analytical precision was 32 percent at a cut-off grade of 3.0 g/t gold. The mine versus TSL precision was confirmed by TSL versus TSL pulp duplicate precision, indicating precision issues are not attributable to the Seabee mine laboratory performance, but that gold grain size distribution presents significant challenges for the analysis method used.
- Screen metallic assays previously reported on indicated the average proportion of coarse gold was 32 percent but could range up to 72 percent of the total grade. There was no direct correlation between coarse gold and grade, and other geologic controls influenced the distribution of "nugget" gold.

Mr. Konst was subsequently contracted by SSR Mining to perform routine reviews of the monthly quality assurance and quality control results of the Seabee Gold Operation.

12.2 Verifications by SRK

12.2.1 Site Visit

In accordance with NI 43-101 guidelines, SRK visited the Seabee Gold Operation from May 29 to 31, 2017, accompanied by representatives of SSR Mining. The SRK team included Messrs. Michael Selby, PEng, and Dominic Chartier, PGeo.

The site visits took place during active drilling and production activities. All aspects that could materially impact the integrity of the data informing the Mineral Resource estimate (core logging, sampling, analytical results, and database management) were reviewed with SSR Mining staff. SRK interviewed mine staff to ascertain exploration and production procedures and protocols. SRK examined core from six boreholes and confirmed that the logging information accurately reflects actual core. The lithology contacts checked by SRK match the information reported in the core logs. SRK toured the underground operations at Santoy and assessed the attributes of the shear-hosted gold-sulphide-chlorite-quartz veins.

12.2.2 Verifications of Analytical Quality Control Data

To assess the accuracy and precision of analytical quality control data, SRK routinely analyzes such data. Analytical quality control data typically comprises analyses from standard reference material, blank samples, and a variety of duplicate data. Analyses of data from standard reference material and blank samples typically involve time series plots to identify extreme values (outliers) or trends that may indicate issues with the overall data quality. To assess the repeatability of assay data, a number of tests can be performed, of which most rely on certain statistical tools. SRK routinely plots and assesses the following charts for duplicate data:

- Bias charts
- Quantile-quantile (Q-Q) plots
- Mean versus half relative deviation (HRD) plots
- Mean versus half absolute relative deviation plot
- Ranked half absolute relative deviation (HARD) plot

12.2.3 Discussion

SRK analyzed the available analytical quality control data of the Seabee Gold Operation to confirm that the analytical results are reliable for informing Mineral Resource estimates. All data were provided in Microsoft Excel spreadsheets from SSR Mining, and SRK aggregated the assay results for the external quality control samples for further analysis. Control samples (blanks and CRM) were summarized on time series plots to highlight the performance of the control samples. Field duplicates and umpire laboratory pulp duplicates were analyzed using bias charts, quantile-quantile, and relative precision plots.

The analytical quality control data produced between 2010 and early 2017 are summarized in Table 5 and a representative selection of this data charted by SRK are presented in Appendix A. The data produced on the Seabee Gold Operation represents approximately 4.1 percent of the total number of samples.

Table 5: Summary of Analytical Quality Control Data Produced on the Seabee Gold Operation

	ALS	(%)	TSL	(%)	Seabee	(%)	Total	(%)	Comment
Sample count	181,288		71,325		59,607		312,220		
Blanks	310	0.17	155	0.22	849	1.42	1,314	0.42	
QC samples	624	0.34	257	0.36	4,139	6.94	5,020	1.61	
SE29	16	0.01	17	0.02			33	0.01	0.597 g/t
SE44					98	0.16	98	0.03	0.660 g/t
SF57			11	0.02	139	0.23	150	0.05	0.848 g/t
SF85					131	0.22	131	0.04	0.848 g/t
SG40	174	0.10	41	0.06	95	0.16	310	0.10	0.976 g/t
SG56					191	0.32	191	0.06	1.027 g/t
SH35	57	0.03	48	0.07			105	0.03	1.323 g/t
SH24	18	0.01	23	0.03	14	0.02	55	0.02	1.326 g/t
SH82					43	0.07	43	0.01	1.333 g/t
SH41	157	0.09	27	0.04			184	0.06	1.344 g/t
SH69					652	1.09	652	0.21	1.346 g/t
SH65					54	0.09	54	0.02	1.348 g/t
SJ63					685	1.15	685	0.22	2.632 g/t
SJ53					96	0.16	96	0.03	2.637 g/t
SJ80					160	0.27	160	0.05	2.656 g/t
SK62					98	0.16	98	0.03	4.075 g/t
SL46	56	0.03	44	0.06	97	0.16	197	0.06	5.867 g/t
SL51	79	0.04			92	0.15	171	0.05	5.909 g/t
SL61	35	0.02	30	0.04	301	0.50	366	0.12	5.931 g/t
SL76					131	0.22	131	0.04	5.960 g/t
SN16					90	0.15	90	0.03	8.367 g/t
SN60					58	0.10	58	0.02	8.595 g/t
SN50					97	0.16	97	0.03	8.685 g/t
SP59					354	0.59	354	0.11	18.12 g/t
SP73					121	0.20	121	0.04	18.17 g/t
SQ36	19	0.01	15	0.02			34	0.01	30.04 g/t
SQ48	13	0.01	1	<0.01	342	0.57	356	0.11	30.25 g/t
Field duplicates	186	0.10	73	0.10			259	0.08	
Check assays			902	1.26			902	0.29	
Total QC Samples	1,120	0.62%	1,387	1.94%	4,988	8.37%	12,695	4.07%	

Analysis of blank samples analysed at the Seabee mine laboratory, TSL and historically at ALS Limited (ALS), indicated acceptable performance. A number of samples, however, yielded values above the warning limit (defined as ten times the lower detection limit), though, this occurred five percent of the time or less at each laboratory. Further examination identified a number of blank samples analysed at the Seabee mine laboratory between 2010 and 2011 that displayed anomalously high gold grades, and indicated potential contamination during the sample preparation process or possible mislabeling of blank material. After 2011, the abundance of failed blanks appeared to be rectified, with all blank samples assaying at or below the warning limit. Post-2013, however, blank material has not been submitted to the Seabee mine laboratory. SRK strongly recommends that blank material, such as barren half core, be inserted routinely into the sample stream to monitor any potential contamination during sample preparation.

SSR Mining uses a series of CRM (standards) which are submitted with mine geology samples at the Seabee mine laboratory, and with exploration samples at TSL, and historically at ALS. Standards submitted to the Seabee mine laboratory and TSL largely performed within expected ranges, and mean grades are similar to expected values. A number of significant outliers, however, have been

observed, which are likely attributed to the mislabeling of other standards used at the time or from the possible mislabeling of blank material. Standards submitted to ALS demonstrate an overall worse performance than those submitted to TSL; however, due to the historic nature of the samples, the cause of the deficiency remains unknown. SRK recommends that SSR Mining continue to monitor the performance of standards and investigate and identify the cause of any significant outliers.

Monthly umpire check assaying is performed at TSL of pulp duplicate samples processed at the Seabee mine laboratory. HARD plots suggest that approximately 60 percent of umpire samples submitted from 2004 to 2017 have HARD below ten percent, indicating that the umpire laboratory had difficulty consistently reproducing pulp assay results from Seabee mine laboratory.

In general, in the opinion of SRK, the performance of control samples inserted with samples submitted for assaying at both the Seabee mine laboratory and TSL, and historically at ALS, are sufficiently reliable to inform Mineral Resources estimation. Blanks should be re-introduced to the mine geology department's quality control program at the Seabee Gold Operation, and standards and monthly umpire check assays should continue to be closely monitored and assessed when significant outlier or poorly performing duplicate assays are encountered.

13 Mineral Processing and Metallurgical Testing

13.1 Style of Mineralization

The Seabee Gold Operation was originally developed on bench scale metallurgical test work that characterized the Seabee deposit as a lode gold style of mineralization that was free milling and that would respond to a standard flowsheet employing gravity recovery and cyanidation. After the successful commissioning of the Seabee mill and the operation matured into exploration in the surrounding area the mill became the reference flowsheet and recovery for other mineralization that was identified as a possible mill feed source.

The Seabee Gold Operation deposits, as well as other deposits in the surrounding area, are lode gold style deposits with the gold in quartz veins typically in shear zones with some variations of the host rock mineralization, with gabbros at Seabee and mafic metavolcanics at the Santoy and Porky deposits. As the satellite deposits advanced to potential development, bench scale testing was employed to confirm the free milling potential and the presence of any deleterious elements. This was followed with testing bulk samples in 2007 and 2008 in the Seabee mill when the economics of the deposits were being evaluated.

No significant issues were identified in any of these criteria with respect to the Porky West and Santoy 7 ore bulk samples. Metallurgical testing of the Santoy Gap ore has not been completed, although it is very similar to the mineralogy of the Seabee deposit that is near depletion and Santoy 8 ore that is currently being processed.

13.2 Metallurgical Investigations

With the good metallurgical response of the Seabee and Santoy deposits, which have been processed to-date, there is little requirement to enhance the mill performance apart from capacity considerations and operating costs. The crushing circuit presents difficulties both in winter operations and with the general conditions of the portable crushing plant that is currently being used. The fine ore bin does not provide sufficient capacity for all crushing delays, requiring separate stockpiling and reclaiming to sustain the mill operation. This has prompted studies of alternatives, including considerations of the installation of single stage crushing and a SAG mill as the primary grinding mill. No commitment on these changes is currently planned.

In 2014, the mill operation was the subject of an independent review, which evaluated its equipment and its achieved results, and identified several areas of the operation that could be improved. In 2016, the leach and absorption circuits were assessed by bench scale testing at an independent laboratory and a separate laboratory reviewed the carbon activity and regeneration results of the Seabee operating practices. The limitations of both areas of the operation will be alleviated by the expansion of the gravity recovery circuit now in progress.

13.3 Recovery Estimates

Historic recovery at the Seabee mill was in the 94 to 96 percent range, with routine low levels of losses both in the tailings solids and solution. Future recovery estimates are 96.5 percent and are based on the recent mill performance with mill recoveries of more than 96.5 percent. These

improvements are attributed to the better condition of the leach equipment as well as the restored leach capacity. Additional discussion on recovery is provided in Section 17.

14 Mineral Resource Estimates

14.1 Introduction

The Mineral Resources for the Seabee Gold Operation comprise the Seabee mine, the Santoy mine, and the Porky deposits. The deposits are mined by underground mining methods. The Mineral Resource Statement presented herein represents the Mineral Resource evaluation prepared for the Seabee Gold Operation in accordance with NI 43-101.

The Mineral Resource model prepared by SSR Mining considers core drilling and chip sampling by SSR Mining and previous operators during the period of 1987 to 2016. The Mineral Resource estimation work was completed by the mine geology department under the supervision of Mr. Jeffrey Kulas, PGeo (APEGGS#12374), Manager Geology, Mining Operations at Seabee Gold Operation, a Qualified Person as this term is defined in NI 43-101. The effective date of the Mineral Resource Statement is December 31, 2016. Mr. Dominic Chartier, PGeo (APEGGS#39656), Senior Consultant (Geology) with SRK, a Qualified Person as this term is defined in NI 43-101, audited the end of year Mineral Resource estimate in the preparation of this Report and provided comments as detailed in Section 14.7.

This section describes the Mineral Resource estimation methodology and summarizes the key assumptions considered by SSR Mining. In the opinion of SSR Mining, the Mineral Resource evaluation reported herein is a reasonable representation of the global gold Mineral Resource found in the Seabee Gold Operation at the current level of sampling. The Mineral Resources have been estimated in conformity with generally accepted CIM *Estimation of Mineral Resource and Mineral Reserves Best Practices Guidelines* and are reported in accordance with NI 43-101. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. Mineral Resources are reported inclusive of Mineral Reserves. There is no certainty that all or any part of the Mineral Resource will be converted into Mineral Reserve.

The database used to estimate the Seabee Gold Operation Mineral Resource was audited by SRK. SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for gold mineralization and that the assay data are sufficiently reliable to support Mineral Resource estimation.

Block modelling techniques were used for Mineral Resource evaluation for the Santoy mine and most of the Seabee mine. Polygonal Mineral Resource evaluation techniques were used in areas of historical mining at the Seabee mine and in the Porky deposit area.

For block modelling, Geovia GEMS software (version 6.6) was used to construct the geological solids, conduct geostatistical analysis and variography, construct the block model, estimate metal grades, and to report the Mineral Resource. Block modelling methodologies have been adapted from previous SRK models and audits in 2011 to 2014, and from a 2016 audit by Ginto Consulting.

The Mineral Resource evaluation methodology involved the following procedures:

- Database compilation and verification.
- Construction of wireframe models for the boundaries of the gold vein mineralization.
- Data conditioning (compositing and capping) for geostatistical analysis and variography.
- Block modelling and grade interpolation.

- Definition of Mineral Resource classification domains and validation.
- Assessment of “reasonable prospects for eventual economic extraction”.
- Preparation of the Mineral Resource Statement.

14.2 Mineral Resource Estimation Procedures

14.2.1 Seabee Mine

Mining at the Seabee mine has demonstrated the presence of well-defined, near vertical veins that may include high grade segments with moderately steep plunges with clearly delineated lateral extents. Depth continuity for the various veins has been established from core drilling conducted from underground drilling stations.

The Seabee mine drill database contains 4,427 underground core boreholes for 832,918 metres, and 887 surface core boreholes for 132,916 metres. In addition, 6,512 chip and muck sample traverses (22,070 samples) were completed. Chip and muck samples are averaged over a distance of 25 metres to include in the estimation process.

Veins from the Seabee mine (2B, 2C, 2D, 5-1, 162, and L62) are reported using block modelling methodologies. Each vein is further sub-divided by level and area of interest defined by drilling. Drilling and chip sampling data are used to generate 10- to 30-metre spaced vein plan and/or sectional polylines. Vein polylines are linked to create vein solids that are used to code resource blocks.

The individual assays are composited to either a 1.0- or 1.5-metre length, depending on the vein width in the area modelled. Grade capping is applied on composites in each vein area separately. Several capping assessments are undertaken incorporating the use of histograms, cumulative frequency curves, and probability plots. Statistical impacts are also verified with cap percentiles, coefficient of variation, and changes in mean values. Capping ranges from 20.0 to 80.0 g/t gold at Seabee mine (Table 6).

Table 6: Capping Values at Seabee Mine

Seabee Veins	Capping (g/t Au)
2B 16East	44
2B West	24
2C 16	44
2C West	54
2D	25
5-1	56
162	20
L62	80

A combination of linear semi-variography and 3D semi-variography is performed on the capped composited data to determine the variograms, search ellipses, and estimation parameters. A standard block size of 3 by 3 by 3 metres is used. Ordinary kriging is used to interpolate gold grades in the block model. SG is assigned as 2.85 at the Seabee mine based on the average SG of samples measured using the water displacement method.

Historical mining areas of the Seabee mine were estimated by polygonal estimation methods and these estimates are maintained in current reporting. These include the following veins: 2J, 2S, 15,

19V, 153, 161, 163 and small portions of 2B, 2C, and 2D. The historical mining areas form a small portion of the global Mineral Resource estimate and are not described in detail here.

14.2.2 Santoy Mine

The Santoy mine is comprised of three zones: Santoy 7, Santoy 8, and Santoy Gap. Mineral Resources are reported for Santoy 8 and Santoy Gap. Mining and drilling at Santoy 8 has defined sub-parallel ore bodies dipping from 40 to 60 degrees east and plunging to the north. Similarly, mining and drilling at Santoy Gap has defined sub-parallel veins dipping from 45 to 55 degrees east and plunging to the north. Both the lateral and horizontal limits of the Santoy 8 and Santoy Gap veins have been defined through underground development and core drilling from surface and underground.

The Santoy mine drill database contains 1,055 underground core boreholes for 184,256 metres, and 527 surface core boreholes for 153,326 metres. In addition, 2,946 chip and muck sample traverses (12,705 samples) were completed. Chip and muck samples are averaged over a distance of 25 metres to include in the estimation process.

All veins from the Santoy mine are reported using block modelling methodologies. The Santoy 8 veins are: 8A, 8B, 8C, 8D, 8F and 8G. The Santoy Gap veins are: 9A, 9B, 9C. Drilling and chip sampling data are used to generate 10- to 30-metre spaced vein sectional and/or plan polylines. Vein polylines are linked to create vein solids that are used to code Mineral Resource blocks.

The individual assays are composited to 1.5-metre length for all veins, except for Santoy 8D and 8G which are composited to 1.0-metre length due to the narrow nature of those veins. Residual composites less than 15 percent of the composite length are excluded. Grade capping is applied on composites in each vein separately. Several capping assessments were undertaken, incorporating the use of histograms, cumulative frequency curves, and probability plots. Statistical impacts are also verified with cap percentiles, coefficient of variation, and changes in mean values. Capping at Santoy 8 ranges from 15.0 to 45.0 g/t gold and from 75.0 to 100.0 g/t gold at Santoy Gap (Table 7).

Table 7: Capping Values at Santoy Mine

Santoy Veins	Capping (g/t Au)
8A	45
8B	25
8C	30
8D	30
8F	35
8G	15
9A	75
9B	75
9C	100

A combination of linear semi-variography and 3D semi-variography is performed on the capped composited data to determine the variograms, search ellipses, and estimation parameters. A standard block size of 3 by 3 by 3 metres is used. Ordinary kriging is used to interpolate gold grades in the block model.

SG of veins is assigned as 2.80 at Santoy 8 and 2.82 at Santoy Gap. Waste SG is defined as 2.91. SG values are based on the average SG of samples measured using the water displacement method.

14.2.3 Porky Deposit Area

The Porky deposit area is comprised of two zones: Porky West and Porky Main. Drilling and mining at Porky West has defined sub-vertical structures dipping approximately 65 degrees to the southwest. Drilling at Porky Main defined shear zones plunging at about 45 degrees to the southeast.

The Porky West drill database contains 89 surface core boreholes for 17,647 metres drilled between 2003 and 2009. In addition, 166 underground chip and muck sample traverses (1,291 samples) were completed. The polygonal Mineral Resource estimation at Porky West was completed in 2009 using GEMS software and verified recently by the mine geology team. A capping value of 15 g/t gold was determined using the 95th percentile. SG of 2.70 was used based on test work completed at the Seabee assay lab. Due to the 65-degree dip of the orebody, the GEMS polygonal resources were estimated using an inclined longitudinal section method.

Porky Main was estimated using polygonal methods by Claude Resources in 2005. However, SSR Mining has not been able to verify the results of this polygonal estimate, therefore Porky Main is not included in the Mineral Resource Statement contained herein, but may be included in the future pending additional drilling and modelling.

Mineral Resource estimates at both Porky West and Main deposits are currently being recreated using block modelling procedures consistent in methodology to those used to calculate Mineral Resources at the Santoy 8 and Santoy Gap deposits.

14.3 Block Model Validation

Block modelling at the Seabee Gold Operation started in 2011 with the maiden Santoy Gap estimate completed by SRK. Since this time, SSR Mining have adapted these methodologies to Santoy mine and portions of Seabee mine. Thus, block modelling methodologies have been based on various audits from SRK in 2011 to 2014 and from Ginto Consulting in 2016.

SSR Mining used a variety of methodologies to validate the Mineral Resources determined by block modelling.

Validation of the high-grade capping thresholds was performed by an independent selection of capping values. Capping for each domain was based on probability plots and a proprietary cutstats utility.

For all domains, SSR Mining validated the block model using a visual comparison of block estimates and informing composites for each domain on sections and plans. The grades can be seen to follow the orientation of the search ellipses. Visual validation of block grades in addition to reconciliation data, as described in Section 14.6, have been the primary methods of block model validation.

14.4 Mineral Resource Classification

Block model quantities and grade estimates for the Seabee Gold Operation are classified according to the *CIM Definition Standards for Mineral Resources and Mineral Reserves*. Mineral Resource classification is typically a subjective concept. Industry best practices suggest that Mineral Resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates, and the geostatistical

confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

SSR Mining is satisfied that the geological modelling honours the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support Mineral Resource evaluation. The sampling information was acquired primarily by closely spaced surface and underground core drilling and supported by underground development and chip sampling.

SSR Mining considers that the gold mineralized zones show good geological continuity, respecting the direction of maximum continuity, and defined by an adequate drill spacing with reliable sampling information allowing classified within the meaning of the *CIM Definition Standards for Mineral Resources and Mineral Reserves*. Mineral Resources are reported within wireframed classification domains (inclusive of in-situ dilution). The average grade within the reported classification wireframes are above the cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine. The classification parameters used to define classification domains are detailed in Table 8.

Generally, for gold mineralization exhibiting good geological continuity, SSR Mining considers that zones can be classified as Measured if one (or more) of the following criteria is applicable:

- The zone is sampled in two-dimensions by mine development within a maximum of 1 or 2 sublevel spacing.
- The zone is sampled in one dimension by mine development and informed by core drilling at a drill spacing of less than 25 metres while respecting the direction of maximum continuity.
- Despite no adjacent sampled mine development, the drill spacing is less than 15 metres while respecting the direction of maximum continuity.

Similarly, SSR Mining considers that gold mineralized zones can be classified as Indicated if the zone is sampled in one dimension by mine development and informed by core drilling at a drill spacing of less than 35 metres while respecting the direction of maximum continuity; or drilled at a spacing of 25 metres or less with no adjoining underground development.

Table 8: Classification Parameters for Underground Mineral Resource at Seabee Gold Operation

Classification		Areas – Underground Development		
		Two Dimensions	One Dimension	None
Measured	Distance from Development	1 or 2 sublevel spacing	Projected no more than the spacing of 2 sublevels	-
	Drill Spacing	-	Closely spaced drilling on the same structure (~<25m)	Drill spacing of ~<15m
Indicated	Distance from Development	-	Projected no more than the spacing of 4 sublevels	-
	Drill Spacing	-	Closely spaced drilling on the same structure (~<35m)	Drill spacing of ~<25m
Inferred	Distance from Development	-	-	-
	Drill Spacing	-	Closely spaced drilling on the same structure (~<75m)	Taken to the extents of the inferred search ellipse while being subject to geological interpretation

Conversely, gold mineralized zones sampled in one direction of mine development and informed by drill spacing of less than 75 metres, or estimated at the extent of the search ellipse can appropriately classified in the Inferred category because the confidence in the estimate is insufficient to allow for the meaningful application of technical and economic parameters or to enable an evaluation of economic viability.

14.5 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) defines a Mineral Resource as follows:

“A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth’s crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction.

The location, quantity, grade or quality, continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling.”

The “reasonable prospects for eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, SSR Mining considers that the majority of the Seabee Gold Operation is amenable for underground extraction.

The block model and polygonal quantities and grade estimates were also reviewed to determine the portions of the Seabee mine, Santoy mine, and Porky deposits having “reasonable prospects for eventual economic extraction” from an underground mine, based on a cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine, assuming a gold price of US\$1,400 per ounce, and metallurgical gold recovery of 96.5 percent. The reporting parameters were selected based on production experience on the project.

SSR Mining considers that the blocks located within the classification domains and the polygonal estimates show “reasonable prospects for eventual economic extraction” and can be reported as a Mineral Resource. SSR Mining is unaware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that may materially affect the Mineral Resource. However, the Mineral Resource may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource estimates. The Mineral Resource Statement may also be affected by subsequent assessments of mining, environmental, processing, permitting, legal, title, taxation, socio-economic, and other factors. The Mineral Resource Statement for the Seabee Gold Operation is presented in Table 9. The effective date of the Mineral Resource Statement is December 31, 2016.

Table 9: Mineral Resource Statement, Seabee Gold Operation, Saskatchewan, SSR Mining Inc., December 31, 2016

Classification/Area	Quantity ('000 t)	Grade Gold (g/t)	Contained Gold ('000 oz)
Measured			
Seabee	175	6.76	38
Santoy Gap	598	7.90	152
Santoy 8	33	9.29	10
Porky West	—	—	—
Total Measured	807	7.71	200
Indicated			
Seabee	111	8.39	30
Santoy Gap	688	8.40	186
Santoy 8	367	9.12	108
Porky West	101	3.57	12
Total Indicated	1,267	8.22	335
Total M&I	2,074	8.02	535
Inferred			
Seabee	356	8.62	99
Santoy Gap	510	9.23	151
Santoy 8	1,454	7.14	334
Porky West	175	5.48	31
Total Inferred	2,495	7.66	615

Notes: Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. Mineral Resources are reported inclusive of Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources are reported within classification domains inclusive of in-situ dilution at a diluted cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine assuming an underground extraction scenario, a gold price of US\$1,400/oz, C\$:US\$ exchange rate of 1.25; and metallurgical recovery of 96.5%. Block modelling techniques were used for Mineral Resources estimates for the Santoy mine and the majority of the Seabee mine. Polygonal techniques were used in areas of historical mining at the Seabee mine at Porky West.

14.6 Reconciliation

The Seabee Gold Operation routinely compares the Mineral Resource and Mineral Reserve models with production results. As an example, the yearly grade reconciliation between the Mineral Resource model, and the actual mined grade from the Santoy Gap underground workings for the period 2014 to the second quarter of 2017, is presented in Table 10. The reconciliation between the Mineral Resource model and recovered grades is reasonable. This demonstrates that the Mineral Resource model adequately predicts grades achieved during mining.

Table 10: Annual Grade Reconciliation at Santoy Gap Between 2014 and the Second Quarter of 2017

Period	M&I Grade (g/t Au)	Mine Grade (g/t Au)	Variance
2014	9.23	7.96	-14%
2015	8.72	8.37	-4%
2016	8.17	8.15	0%
Q2 2017	7.92	9.27	17%

14.7 SRK Comments

During the last five years, focus at the Seabee Gold Operation has been on upgrading its Mineral Resource estimation methodologies from polygonal estimates to geostatistically-estimated three-dimensional block models constrained by vein wireframes. Polygonal grade estimation techniques are now restricted to Mineral Resource reporting in areas of historical mining at the Seabee mine and Porky deposits.

Chip and muck samples are composited over a distance of 25 metres to include in the estimation process. This methodology provides a broad average grade which may not accurately reflect the local observed variance. SSR Mining should review whether this practice is still necessary by estimating with local chip sample results. This sensitivity analysis will assess the impact of the methodology by comparing with actual mine grades.

The current methodology of estimating in broad vein domains should be reviewed as clearly defined waste zones are being incorporated into the grade estimation process. SRK believes that SSR Mining has an opportunity to enhance the local accuracy of the grade estimation by considering defining areas of low grade as sub-domains in zones of strong gold mineralization, to eliminate these low grade / waste zones from vein definitions. SSR Mining could also revisit the current practice of reporting all blocks within classification domains, irrespective of the grade in relation to reporting cut-off grades.

SRK is of the opinion that the SSR Mining's proposed exploration program, including expanding the Santoy mine Mineral Resource and further definition drilling at the Porky deposits has the potential to expand further the Mineral Resource, with a positive impact on the life of mine plan.

15 Mineral Reserve Estimates

This section summarizes the key assumptions, parameters, and methods used in the preparation of the Mineral Reserve Statement for the Seabee Gold Operation. The Mineral Reserve Statement presented herein was prepared for public disclosure.

The Mineral Reserve estimate was completed by the SSR Mining technical department on site at the Seabee Gold Operation. SRK reviewed the assumptions, parameters, and methods used to prepare the Mineral Reserve Statement and is of the opinion that the Mineral Reserve is estimated in conformity with *CIM Mineral Resource and Mineral Reserves Estimation Best Practices Guidelines* (November 2003) and is classified according to *CIM Definition Standards for Mineral Resources and Mineral Reserves* (May 2014) guidelines.

The Mineral Reserve Statement is reported in Table 11 and is in accordance with NI 43-101. The reference point at which the Mineral Reserve is identified is where ore is delivered to the processing plant (i.e. “mill feed”). SRK is unaware of any environmental, permitting, legal, title, taxation, socio-economic, marketing, political, or other relevant issues that may materially affect the Mineral Reserve. However, the Mineral Reserve may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent Mineral Resource and Mineral Reserve estimates. The Mineral Reserve may also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. The effective date of the Mineral Reserve Statement is December 31, 2016.

**Table 11: Mineral Reserve Statement, Seabee Gold Operation, Saskatchewan, Canada
SRK Consulting (Canada) Inc., December 31, 2016**

Category	Quantity (‘000 t)	Gold Grade (g/t)	Contained Gold (‘000 oz)
Proven			
Santoy Mine	380	7.41	90
Seabee Mine	82	6.98	18
Broken (Underground and Stockpile)	56	4.04	7
Total Proven	518	6.97	116
Probable			
Santoy Mine	805	9.03	234
Seabee Mine	48	7.37	11
Total Probable	854	8.93	245
Total Proven and Probable	1,371	8.19	361

Notes: Mineral Reserves are included in Mineral Resources. All figures have been rounded to reflect the relative accuracy of the estimate. Mineral Reserves are based on a cut-off value of 4.92 g/t gold for the Seabee mine and 3.65 g/t gold for the Santoy mine assuming: a gold price of US\$1,250/oz; a C\$:US\$ exchange rate of 1.25; milling recoveries of 96.5%; royalty of 3.0%; and operating cost of C\$231/t at the Seabee mine and C\$172/t at the Santoy mine. Mineral Reserves are stated at a mill feed reference point and include for diluting materials and mining losses.

The Mineral Reserve includes 67 percent of the Measured and Indicated Mineral Resource estimate presented in Section 14 of this Report. The conversion rate is less than 100 percent due to the difference in cut-off grade between the Mineral Resource and the Mineral Reserve, exclusion of the Porky West deposit from the Mineral Reserve, economic vein width versus minimum mining width, and economically prohibitive capital development requirements.

15.1 Mineral Reserve Methodology

The estimation of the Mineral Reserve involves the following procedures:

- Review the geological information and Mineral Resource block model for the selection of applicable mining methods.
- Determine the cut-off value based on the current budget operating cost figures and other economic considerations.
- Outline potentially mineable stopes, including internal dilution to achieve a minimum mining width, using Dassault Systemes Surpac mine planning software.
- Apply modifying factors (dilution and operating recovery).
- Validate the economic viability of each potentially mineable stope against the estimated operating cost and underground capital development cost to extract that stope.
- Eliminate outlines of potentially mineable stopes that are not economic.
- Generate underground development designs to provide access to the remaining potentially mineable stopes.
- Generate a development and production schedule using historical crew performances and infrastructure capacities.
- Determine infrastructure, equipment, supplies, services, and labour requirements to achieve the development and production schedule.
- Validate the economic viability of the overall plan in a cash flow model using current budget operating and capital cost figures.
- Prepare the Mineral Reserve Statement.

15.2 Preparation of Mineral Reserve Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (May 2014) defines a Mineral Reserve as follows:

“A Mineral Reserve is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.”

The key assumptions and parameters considered to assist with the preparation of the Mineral Reserve Statement for the Seabee Gold Operation are summarized in the sections below.

15.2.1 Cut-off Grade

SSR Mining used cut-off grades of 3.65 g/t gold and 4.92 g/t gold for the Santoy and Seabee mines, respectively to estimate the Mineral Reserve at each mine. The cut-off grades were determined based on the following:

- Gold price of US\$1,250/oz
- Exchange rate of C\$1.25:US\$1.00
- Milling recovery of 96.5 percent
- Royalty of 3.0 percent
- Operating cost of C\$172/t at Santoy mine and C\$231/t at Seabee mine

15.2.2 Minimum Mining Width

Longhole mining methods are used at the Santoy mine and Alimak mining methods are used at the Seabee mine. At both mines a minimum mining width of 1.8 metres is achieved. Where parallel veins are within 4.0 metres of each other, the veins are mined as a single stope.

15.2.3 Dilution

An external dilution of 0.18 metres on each the hangingwall and footwall was applied to the planned stope outlines for the Santoy mine. At the Seabee mine, an external dilution of 0.50 metres on each the hangingwall and footwall was applied to the planned stope outlines. These external dilution factors were derived from ongoing stope reconciliations using actual mucking and cavity monitor survey data.

Internal and external dilution were assigned a grade of 0.50 g/t gold based on historical practice.

15.2.4 Operating Recovery

An operating recovery (or “mining recovery”) of 94 percent was applied to the planned stope outlines based on actual ongoing stope reconciliations used to determine the external dilution factor.

15.3 Mineral Reserve Reconciliation

The Seabee Gold Operation regularly reconciles the budgeted production tonnage and ounces with actual production tonnage and gold ounce results. A summary of the reconciliation is provided in Table 12 and indicates that the Mineral Reserve is within an acceptable tolerance of actual results in recent years.

Table 12: Annual Milled Tonnage and Poured Ounces Reconciliation

Year	Budget		Actual		Variance	
	Tonnes Milled	Ounces Poured	Tonnes Milled	Ounces Poured	Tonnes Milled	Ounces Poured
2012	298,000	54,500	275,000	48,600	-8%	-11%
2013	302,000	54,200	280,000	45,000	-7%	-17%
2014	289,000	51,900	280,000	62,700	-3%	21%
2015	291,000	64,900	277,000	74,600	-5%	15%
2016	311,000	70,000	313,000	77,600	1%	11%

16 Mining Methods

16.1 Introduction

This section summarizes the key components of the mine plan that form the basis of extracting the Mineral Reserve. Actual data and current operating practice are referenced heavily as the mine plan is based on the successful continuation of current practice.

The mine plan was initially completed by the SSR Mining technical department on site at the Seabee Gold Operation and included plans for the overall extraction of the Mineral Resource. SRK has since reviewed the mine plan and made the appropriate modifications to include extraction of only the Mineral Reserve.

The life of mine plan of the Mineral Reserve at the Seabee Gold Operation, commencing January 1, 2017, includes 1.371 million tonnes at an average grade of 8.19 g/t gold. The Mineral Reserve estimate includes dilution from hangingwall and footwall overbreak based on ongoing stope reconciliation. A total of 361,000 ounces of gold will be delivered to the mill.

Mining will take place at both the Santoy mine and Seabee mine at an average combined total production rate of 920 tonnes per day. Continuous production from the Seabee mine is scheduled to be completed in 2018, with some lower value remnant mining planned to coincide with the closure of the entire Seabee Gold Operation in 2021. Thus, the Santoy mine will provide most of the production included in the Mineral Reserve. To achieve the Mineral Reserve production plan, 14,300 metres of capital and operating development is required.

Access underground at the Santoy mine is provided from surface at the Santoy portal via a main ramp. Sublevels are typically spaced 17 metres vertically. At the Santoy mine, stoping will take place between 7 Level and 52 Level. At the Santoy mine, levels are named for their distance below surface in metres divided by 10. Stopes are mined and will continue to be mined via a longhole (sublevel open stoping) mining method. On occasion when the strike length of localized areas is minimal, sublevels will be accessed via an Alimak raise rather than a ramp. The planned stopes range in width from 2.2 up to 26.0 metres and can be up to 40.0 metres in length. Once mined, where sequencing and access requirement dictate, stopes are backfilled with waste rock or cemented waste rock. The mining sequence will continue to proceed in several longitudinally retreating, bottom-up advancing mining fronts. Current practice for material handling will remain with ore being truck hauled to surface and then hauled 14.0 kilometres to the mill located at the Seabee mine. A longitudinal section of the Santoy mine is provided in Figure 12.

At the Seabee mine, mining will occur on 1300 Level until 2018. (At the Seabee mine, levels are named for their distance below surface in metres). Remnant mining in late 2020 and early 2021 is distributed throughout the mine. Access from surface from the Seabee portal is provided via a main ramp to the deepest levels. Alimak mining methods will be used to recover the remaining planned stopes. The Seabee shaft will continue to be used to hoist the ore to surface. A longitudinal section of the Seabee mine is provided in Figure 13.

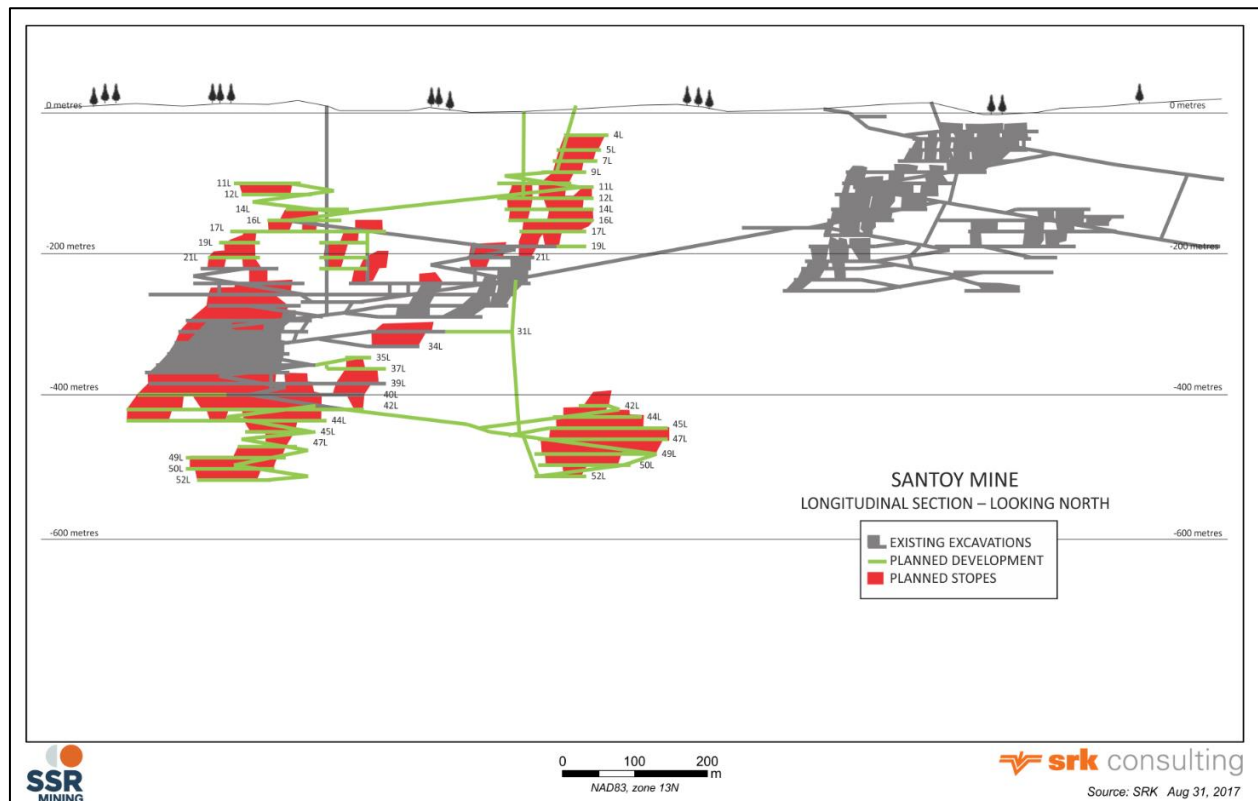


Figure 12: Santoy Mine Longitudinal Section



Figure 13: Seabee Mine Longitudinal Section

16.2 Mining Methods

Longitudinally retreating longhole mining methods are currently used at the Santoy mine for the majority of production. The minimum mining width is 1.8 metres. Planned stopes range in width, with 75 percent by tonnage from stopes ranging between 3.0 and 9.0 metres. Where parallel veins are within 4.0 metres of each other, the veins will be mined as a single stope. Thus, some planned stope widths are up to 16 metres with one stope at 26 metres wide. The length of the stopes varies based on deposit geometry and geotechnical guidance. The maximum strike length of a stope is 40 metres. As mentioned in Section 15.2.3, external dilution is included based on ongoing stope reconciliations using actual mucking and cavity monitor survey data.

Levels are typically spaced 17 vertical metres apart, floor-to-floor. The sill drifts on the levels are connected to a ramp to permit access for the rubber-tired mobile equipment fleet.

Longhole drills are used to drill down from the top level to breakthrough into the bottom level of the stope.

For localized areas with minimal strike length, Alimak mining methods, or captive longhole mining methods, are used to reduce lateral development costs. Access to the captive stopes is provided via an Alimak raise. Where the stope extends less than 15 metres from the Alimak raise, production drilling is completed from the Alimak raise climber. For larger stopes, subdrifts are driven to permit access for a longhole drill.

On completion of mining, stopes are backfilled with development waste rock. A cemented waste rock rib pillar is placed when mining occurs adjacent to backfill stopes. Based on stope sequence and long-term access requirements, approximately 25 percent of the planned stopes can be left open without backfill.

At the Seabee mine, only Alimak mining methods will be used to extract the remaining stopes. The remaining stopes at Seabee mine will not be backfilled.

16.3 Primary Access

Primary access at the Santoy mine is provided via a main ramp from the surface to the deepest levels. The main ramp begins at the Santoy portal, which is located at the top of the Santoy 8 deposit. Depending on the geometry of the deposit, the main ramp splays into secondary ramps to access longitudinally separated sections of the mine. The ramps are driven 5.0 metres wide by 5.0 metres high to permit access for the 40-tonne haulage trucks. Extensions to the existing ramps and additional ramps will be driven to provide access to planned mining levels.

Primary access at the Seabee mine is also provided via a main ramp from the surface to the deepest levels. The main ramp at the Seabee mine is independent from the Santoy mine and is accessed from the Seabee portal. The ramp is substantially complete.

16.4 Level Design

At the Santoy mine, mining levels are driven from access crosscut drifts from the ramps. Typical level infrastructure excavations include a sump and a truck dump/remuck. Some levels include a drift to access and transfer ventilation from the levels above or below. Access to the longhole stopes is accomplished with sill drifts driven from the access crosscuts. The sill drifts are used for deposit

definition, production mucking, and production drilling. The sill drifts are driven 4.0 metres high with the width varying to suit the width of the ore, to a maximum of 10 metres.

For a typical Alimak stope, level development consists of a haulage drift, a sill drift, and an Alimak chamber on the lower level and an access drift on the upper level.

16.5 Material Handling

Ore and waste are hauled via 40-tonne haulage trucks at the Santoy mine. Ore is transported to surface where it is dumped and transferred via a wheeled loader into 40-tonne articulated dump trucks. The ore is then hauled a distance of 14 kilometres to the mill stockpile located near Seabee mine. Waste rock remains underground for deposition into mined stopes.

At the Seabee mine, ore and waste are hauled via 30-tonne haulage trucks. The ore is hauled a short distance underground to the Seabee shaft to be hoisted to surface. Waste remains underground.

16.6 Ventilation

The primary ventilation circuit at the Santoy mine provides 105 cubic metres per second (220,000 cubic feet per minute) of downcasting air through the main ramp and exhausts through a ventilation raise located centrally at the Santoy Gap deposit. There are two primary fans located on surface and three booster fans located underground requiring 560 kilowatts (750 horsepower) of power.

Modifications to the ventilation system are currently under construction with completion anticipated before winter, 2017. The primary ventilation circuit will be reversed and its capacity increased to downcast 142 cubic metres per second (300,000 cubic feet per minute) through the ventilation raise at the Santoy Gap deposit. Ventilation will exhaust via the main ramp. The current primary fans will be replaced by two fans located at the top of the Santoy Gap deposit ventilation raise with a total power of 670 kilowatts (900 horsepower).

At the Seabee mine, 45 cubic metres per second (90,000 cubic feet per minute) of fresh air is distributed to the workplaces underground via the main ramp. Exhaust air returns to surface through several raises, the main shaft, and historical workings connected to surface. The primary fans include one fan located near the Seabee portal and one fan located underground with a total power requirement of 300 kilowatts (400 horsepower).

Fresh air for both mines is heated by propane heaters during the colder winter months.

16.7 Backfill

Cemented and uncemented waste rock is used for backfill at the Santoy mine. Waste rock from development headings is used to backfill mined stopes. Waste rock is stockpiled on surface temporarily when open stopes are unavailable for deposition.

The cement for the backfill comes from a bagged dry-mix product that is turned into useable wet cement near the workplace using a transportable mixer. The bagged dry-mix is stored on surface and brought underground as required.

Based on the underground development design and schedule, there will be a shortfall of backfill material available from development waste rock in 2019. The current plan will use quarried material from the Seabee Gold Operation site to make up the backfill material shortage. However, alternate,

more cost-effective means to address the shortfall are being investigated including recycling waste rock from fully depleted mining areas (*i.e.*, historical Santoy 8 deposit stopes), developing mining methods that require less backfill, and using cemented tailings.

Backfill is not required at the Seabee mine.

16.8 Dewatering

Main dewatering is accomplished at the Santoy mine via main sump/pumping station on 28 Level and 30 Level at the Santoy Gap deposit. The water is pumped to the Santoy 8 deposit underground settling sump and then to the surface mine water management pond located near the Santoy portal.

The Santoy mine dewatering requirements are summarized in Table 13 and are based on actual ground water inflows and mining activities.

The Seabee mine dewatering system is comprised of three main pumping stations. These pumping stations are located at 980 Level, 495 Level, and 250 Level. The water is pumped to the surface settling ponds via a 200-millimetre pipeline located in the Seabee shaft. The average amount of water pumped from Seabee mine is 2,200 cubic metres per day (405 U.S. gallons per minute).

Table 13: Santoy Mine Dewatering Requirements

Source	Dewatering Requirement	
	m ³ /day	US gallons/min
Ground Water	280	50
Mining Activities	150	28
Total	430	78

16.9 Hydrology Considerations

Water inflow is well understood at the Seabee Gold Operation based on actual data and is not expected to change during the life of mine. The current dewatering infrastructure system adequately manages water inflows and the system is expected to be expanded as the footprint of the Santoy mine expands.

16.10 Geotechnical Considerations

16.10.1 Rock Mass Quality and Rock Properties

The rockmass at the Santoy mine is generally classified as good with a rock mass rating (Bieniawski 1976) (RMR76) of 71 to 79 percent. There are some areas classified as fair, with a RMR76 of 52 to 57 percent.

Rock property testing has not been performed at the Santoy mine, but rock property testing performed for the Seabee mine provides analogous results (Table 14, Table 15 and Table 16).

Table 14: Summary of Testing Results for the Hangingwall Structure at Seabee Mine

Zone/Box	Conversion Factor, K	UCS Point Load (MPa)	UCS (MPa)	Tensile Strength (MPa)	Static E (GPa)	Static v	Dynamic E (GPa)	Dynamic v	Φ	C (MPa)
HW / U11-037	18	100 ± 19 (10)	102 ± 53 (6)		43 ± 9 (2)	.29 ± .06 (2)	56 ± 10 (10)	.23 ± .03 (10)		
HW / U11-357	18	109 ± 29 (9)	100 ± 5 (4)	13 ± 2.4 (10)	43 ± 12 (3)	.19 ± .08 (3)	51 ± 3 (4)	.28 ± .01 (4)		
Average*	18	105 ± 25	102 ± 41	13 ± 2.4	43 ± 11	.23 ± .09	54 ± 9	.24 ± .03	45°	12

* Averages are calculated from all test results

Table 15: Summary of Testing Results for the Footwall Structure at Seabee Mine

Zone/Box	Conversion Factor, K	UCS Point Load (MPa)	UCS (MPa)	Tensile Strength (MPa)	Static E (GPa)	Static v	Dynamic E (GPa)	Dynamic v	Φ	C (MPa)
HW / U11-037	22	169 ± 45 (10)	171 ± 48 (6)		75 ± 12 (2)	.20 ± .05 (2)	62 ± 7 (10)	.17 ± .06 (10)		
HW / U11-357	11	90 ± 22 (11)	90 ± 35 (4)	12.8 ± 2.6 (10)	78 ± 21 (4)	.21 ± .11 (4)	76 ± 15 (4)	.22 ± .05 (4)		
Average*	17	138 ± 35	139 ± 59	12.8 ± 2.6	77 ± 18	.21 ± .09	67 ± 11	.18 ± .06	48°	30

* Averages are calculated from all test results

Table 16: Summary of Testing Results for the Orezone Structure at Seabee Mine

Zone/Box	Conversion Factor, K	UCS Point Load (MPa)	UCS (MPa)	Tensile Strength (MPa)	Static E (GPa)	Static v	Dynamic E (GPa)	Dynamic v	Φ	C (MPa)
OZ / U11-037				17.6 ± 2.0 (10)						
OZ / U11-357	8	71 ± 26 (20)	70 ± 18 (10)		35 E 18 (5)	.17 ± .05 (5)	55 ± 9 (14)	.21 ± .04 (14)	57°	23

(x) Number of tests completed

16.10.2 Stress Regime and Most Likely Mode of Failure

Stress monitoring and in situ stress measurements have not been conducted at the Santoy mine. It is assumed, based on typical Precambrian Canadian Shield conditions (Herget 1988) that the horizontal to vertical stress ratio is 2 and that the major principal stress direction is horizontal and parallel to the strike of the orebody.

The most likely mode of failure at the Santoy mine is either structural or rockmass driven failure. In areas where the RMR is 71 to 79 percent, the dominant mode of failure will be structural. In areas where the RMR is 52 to 57 percent, the dominant mode of failure will be wedge failure. Gravity is the driving force for failure as high stress with seismic activity and rock bursting is not a concern due to the shallow depth of mining.

16.10.3 Specific Geotechnical Risk

The geotechnical risks at the Santoy mine are structural and rockmass driven failure. Based on geotechnical underground mapping, the Santoy mine has three primary joint sets that contribute to potential structural failure (Figure 14):

- JS1 – 58°/358°
- JS2 – 80°/267°
- JS3 – 13°/195°

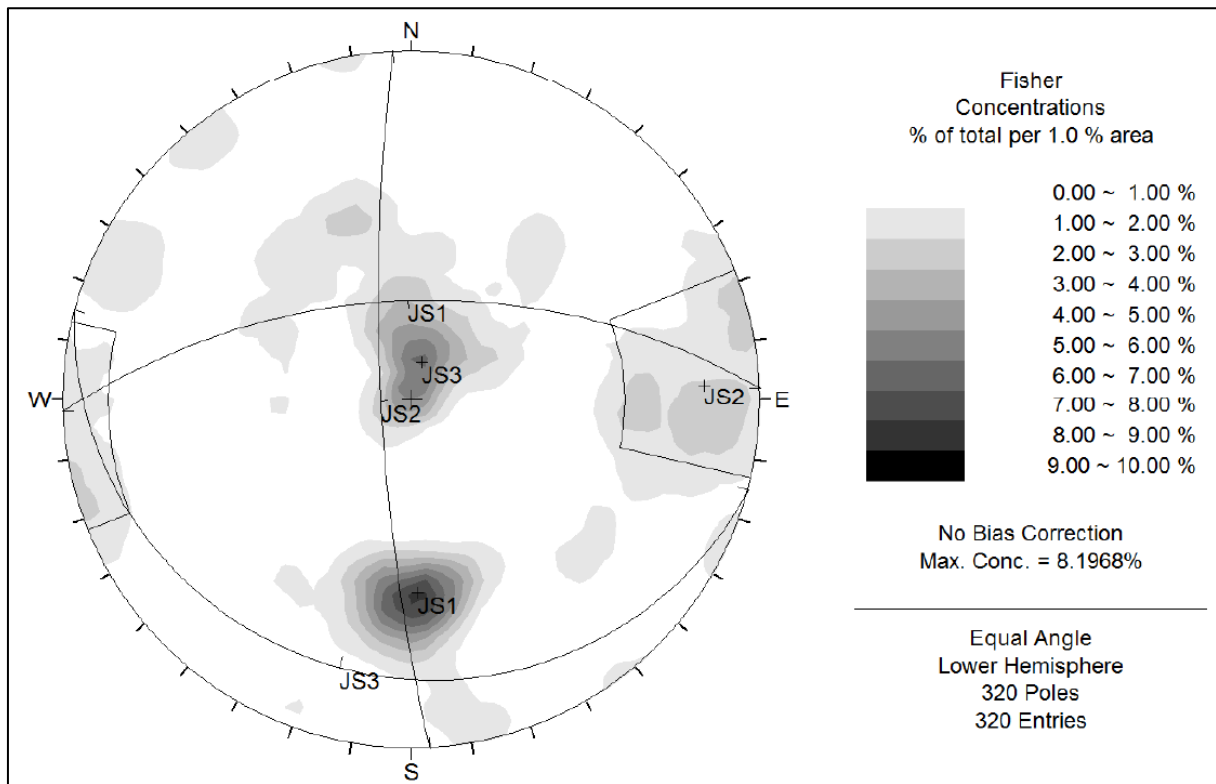


Figure 14: Stereonet of Joint Orientations Collected at Santoy Gap Deposit

In the areas where the rockmass is fair the failure mode will likely be wedge failure due to gravity in sills that are greater than 8.0 metres in width. In areas of with a good rockmass or under 8.0-metre span, the failure mode will likely be structural.

16.10.4 Current Mitigation Measures Used to Minimize the Geotechnical Risk

Support System

At the Santoy mine there are currently several ground support systems in place that are selected depending on the width of the excavation and its application:

- Inclines/Declines: 2.4-metre threaded-both-end mechanical rockbolts on a 1.2-by-1.2-metre pattern in the back, 10-by-10-millimetre 6-gauge screen on the back and walls, and 1.8-metre splitsets on 1.2-by-1.2-metre pattern in the walls.
- Intersections 6 to 9 metres wide: 2.4-metre #6 rebar on a 1.2-by-1.2-metre pattern in the back, 10-by-10-millimetre 6-gauge screen on the back and walls, and 1.8-metre splitsets on 1.2-by-1.2-metre pattern in the walls.
- Sills less than 6 metres wide: 1.8-metre threaded-both-end mechanical rockbolts on a 1.2-by-1.2-metre pattern in the back, 10-by-10-millimetre 6-gauge screen on the back and walls, and 1.8-metre splitsets on 1.2-by-1.2-metre pattern in the walls.
- Sills 6 to 7 metres wide: 2.4-metre threaded-both-end mechanical rockbolts on a 1.2-by-1.2-metre pattern in the back, 10-by-10-millimetre 6-gauge screen on the back and walls, and 1.8-metre splitsets on 1.2-by-1.2-metre pattern in the walls.
- Sills greater than 7 metres wide: designed cablebolt plan that is dependent on site investigation.

Barrier Pillar

Currently the only barrier pillar at Santoy is the 37 to 38 Level cemented rock fill pillar. This is a pillar located at the bottom of the current stoping block, and in the future, there will be uphole stoping directly underneath the cemented rock fill pillar. The cemented rock fill pillar is composed of 5 percent binder mixed with development waste rock.

Extraction Sequence

The extraction sequence includes stopes being extracted from the bottom of the stoping block to the top of the stoping block, and from the extremities of the level towards the access near the centre.

Backfill

At the Santoy mine, two types of backfill are used: unconsolidated rock fill, and cemented rock fill. Cemented rock fill is used when mining occurs directly adjacent to the backfill stopes. All other stopes that are backfilled, are filled with unconsolidated waste rock from development elsewhere in the mine.

16.11 Mine Schedule

The Mineral Reserve life of mine extends to the first quarter of 2021 at a production rate of 920 tonnes per day. The Mineral Reserve production profile tonnage and contained gold ounces are shown in Figure 15 and Figure 16.

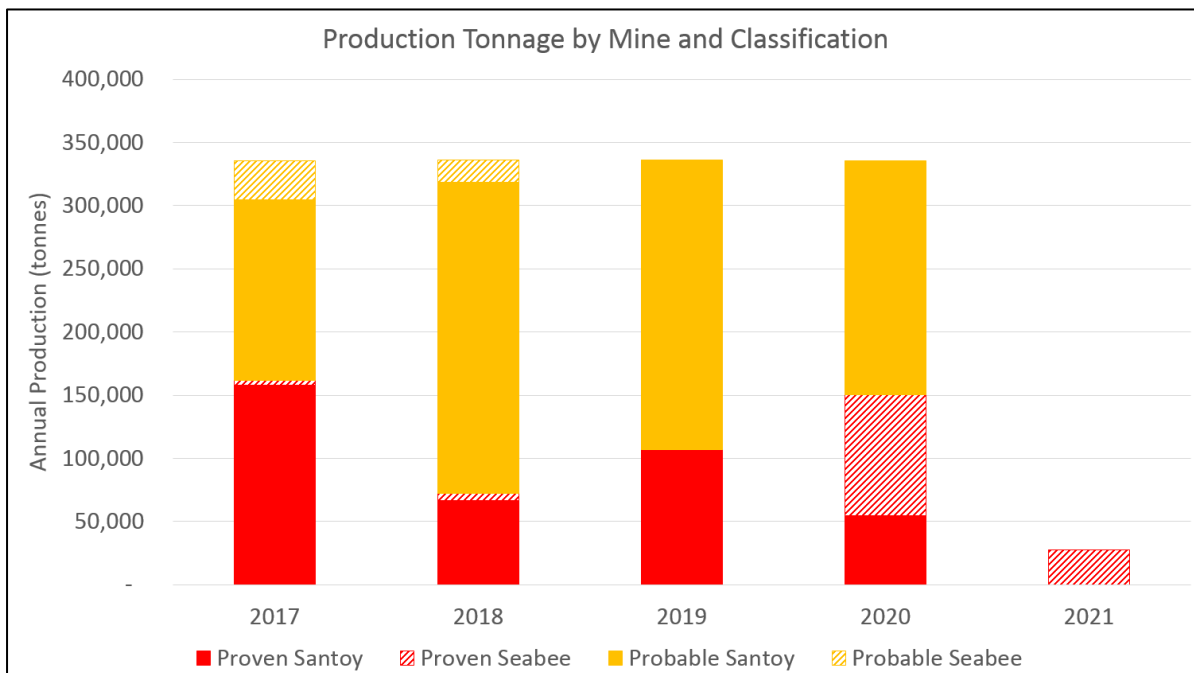


Figure 15: Mineral Reserve Production Plan Tonnage

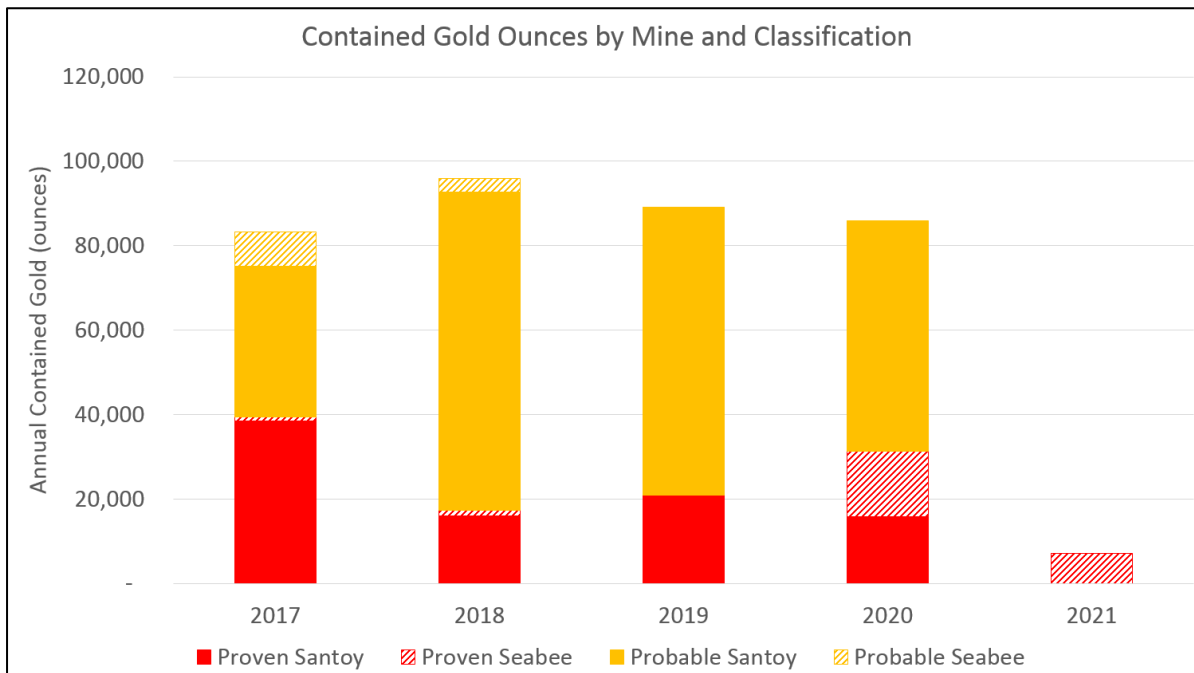


Figure 16: Mineral Reserve Production Plan Contained Gold Ounces

The underground development requirements to realize the life of mine production plan are summarized in Table 17. Annual waste rock generation and backfill requirements are also included in Table 17.

Table 17: Development, Waste Rock, and Backfill Summary

	Unit of Measure	2017	2018	2019	2020	2021	Total
Development							
Capital Lateral	metres	2,200	2,700	400	500	0	5,900
Operating Lateral	metres	2,100	1,900	1,300	800	0	6,100
Capital Alimak	metres	200	400	0	0	0	600
Operating Alimak	metres	800	600	500	0	0	1,800
Total	metres	5,200	5,600	2,200	1,300	0	14,300
Waste Rock Generated	tonnes	235,000	270,000	80,000	60,000	0	650,000
Backfill Requirement	tonnes	235,000	270,000	280,000	150,000	0	940,000

Note: Sum of individual values may not match total due to rounding.

16.12 Mobile Equipment

The peak requirements for the primary mining mobile equipment fleet are listed in Table 18. The existing equipment fleet will fulfil much of the peak requirements, with one 6-cubic yard load-haul-dump machines (LHD) and two 40-tonne haulage trucks purchased as new or replacement equipment over the life of mine.

Table 18: Peak Mining Mobile Equipment Fleet

Equipment	Fleet Size
6-cubic yard load haul dump	4
8-cubic yard load haul dump	2
40-tonne haulage truck	7
2-Boom jumbo	3
1-Boom jumbo	2
Top-hammer production drill	1
Scissor deck	4
Alimak	3
Explosives loader	1
Fuel/lube truck	1
40-tonne dump truck (surface)	5

17 Recovery Methods

17.1 General

The Seabee deposit was processed for 25 years in the mill constructed immediately adjacent to the Seabee shaft. In the last several years the mill processed increasing levels of the Santoy deposit that is being trucked to the Seabee mill site. The remote location of the mine in northern Saskatchewan is sustained by air transport for the workforce and winter road access for supplies. The operation was initially developed and operated on diesel power and later connected to Saskatchewan grid power in 1992. The initial capacity was 500 tonnes per day, which was later expanded to 1,000 tonnes per day with the addition of a third grinding mill. The mill flowsheet as shown in Figure 17 is a conventional crushing and grinding circuit employing gravity concentration and cyanide leaching with carbon-in-pulp (CIP) for recovery and production of doré gold on site.

Table 19 shows the main operating statistics for the Seabee mill over the last ten years, which was the main reference in planning the future operations on other deposits in the area as well as the Santoy deposit.

Table 20 shows the major consumables in the Seabee mill from monthly records for the current operating year.

The mill maintains a high availability and routinely averages more than 94 percent operating time with the average monthly rate from 2014 to the present being 94.6 percent. Currently, an addition to the gravity recovery circuit is being installed that will increase the gravity gold recovery and reduce the limitations of the main cyanide leach circuit.

Table 19: Seabee Mill Production Statistics, 2006 to 2016

		2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Production	t	246,000	227,700	228,400	247,641	203,958	257,181	275,235	280,054	279,597	277,386	312,679
Daily Rate	tpd	674	624	626	678	559	705	754	767	756	760	857
Mill Head Grade	g/t	6.16	6.35	6.46	6.17	7.55	5.68	5.86	5.11	7.32	8.82	7.91
Recovery	%	93.6	95.4	95.8	95.3	95.5	95.3	95.6	95.3	95.7	96.3	96.6
Gold Produced	oz	46,300	44,323	45,466	46,827	47,270	44,750	44,756	43,850	62,984	75,748	80,351

Table 20: Major Consumables at the Seabee Mill

Materials	kilograms /tonne
Grinding Media (2 and 4 inch balls)	0.984
Sodium Cyanide	0.72
Lime	0.28
Flocculant	0.019
Carbon	0.057
Caustic	0.048
Hydrochloric Acid	0.008
Alcohol	0.035

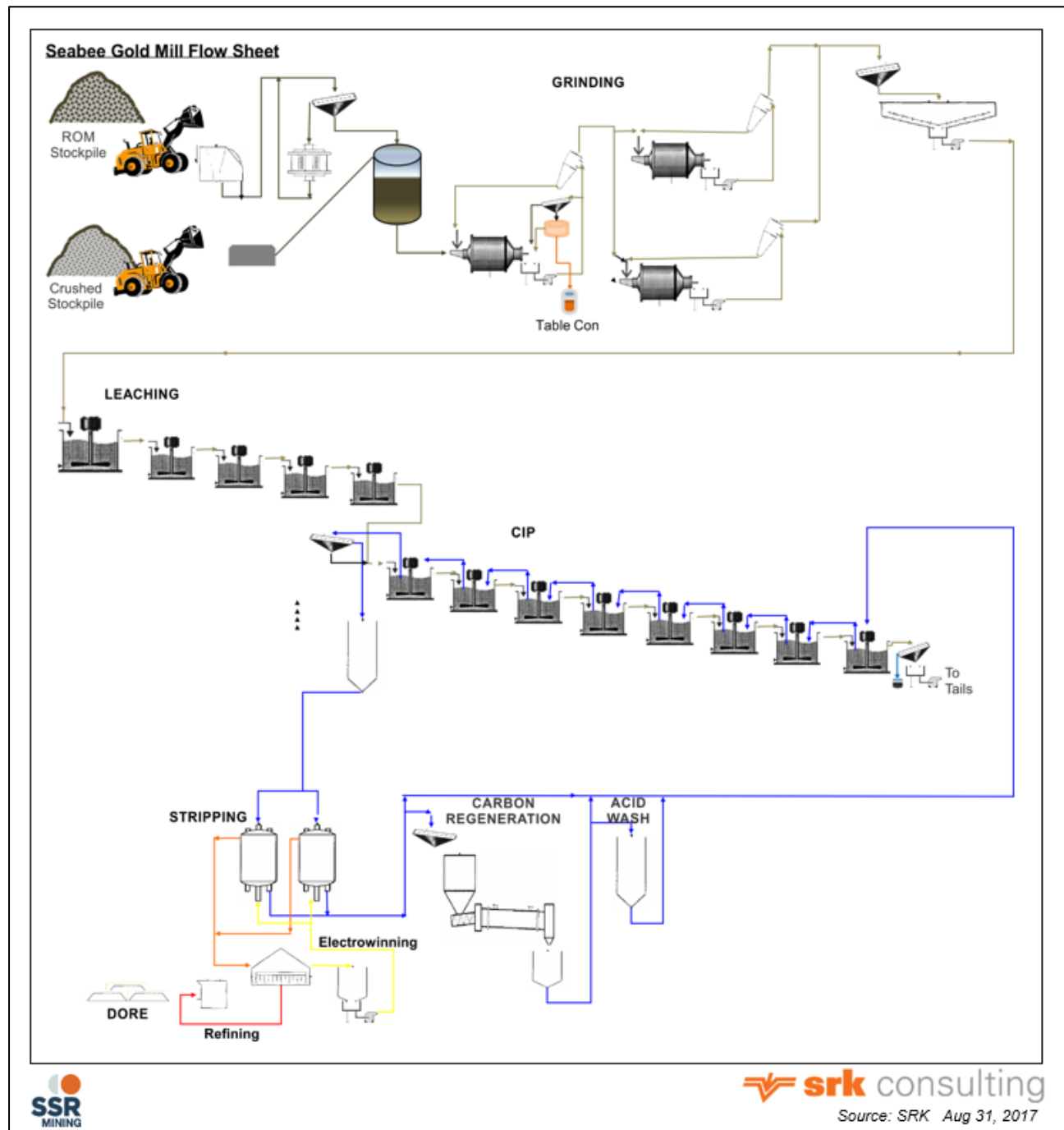


Figure 17: Seabee Mill Flowsheet

17.2 Crushing

The run of mine ore is crushed in the mill yard in a portable style crushing plant. Primary crushing is carried out with a jaw crusher followed by cone crushing in closed circuit with a triple deck screen. The product from the crushing circuit, at minus 20 millimetres, is conveyed to the ore storage bin, which has a live capacity of 400 tonnes. To increase the storage capacity between the crusher and the

grinding circuit, and allow for crusher breakdowns or scheduled maintenance, fine crushed ore is stockpiled in the yard and fed into the circuit through the original crushing feed point.

17.3 Grinding

The grinding circuit consists of a ball mill 2.9 metres in diameter and 3.7 metres long serving as the primary grinding mill. Two secondary mills, 2.7 metres in diameter and 2.6 metres long, complete the grinding to 80 percent passing 200 mesh. The grinding mills operate in closed circuit with hydrocyclones. The ground product is thickened to 47 percent solids in a 12-metre thickener prior to entering the leach circuit. Cyanide, at the rate of 0.72 kilograms per tonne, and lime at 0.27 kilograms per tonne, is introduced to the flow in the grinding circuit to maintain the pH and free cyanide levels for optimum leach conditions.

17.4 Gravity Recovery

A portion of the cyclone underflow on the primary grinding mill is directed to a Knelson concentrator for further concentration on a vibrating table. The gravity concentrate, averaging approximately 40 percent of the total gold recovered, is refined with the gold recovered in the hydrometallurgical circuit.

The gravity recovery circuit is currently being expanded with a second Knelson concentrator and the installation of an Acacia reactor, which will recover the gravity gold in a separate intense cyanide leach and electrowinning circuit. Installation of this equipment is expected to be complete later in 2017, and will raise the recovery of gold by gravity to an estimated 60 percent. The current circuit employs a single Knelson concentrator, for which production must be interrupted to remove concentrates and carry out maintenance. The addition of the second Knelson concentrator will allow a more continuous operation of the gravity recovery circuit. Benefits of this addition to the flowsheet will include a reduction in the circuit gold inventory, reduction in cyanide consumption, and relief of some of the current limitations with the existing CIP and carbon handling circuits.

17.5 Cyanide Leaching

The leach circuit consists of five agitated leach tanks: one of which is 14.6 metres in diameter and 14.6 metres in height, and four of which are 8.8 metres in diameter and 8.8 metres in height. Air injection is maintained in all tanks as well as cyanide addition to the initial tanks to maintain the free cyanide level to complete gold dissolution. At the nominal mill capacity, the circuit provides 72 hours of leach time.

17.6 Carbon-in-Pulp

The carbon absorption circuit consists of eight tanks that are 3.4 metres in diameter and 4.6 metres in height equipped with launder screens to maintain the activated carbon captive in the tanks. The carbon circuit typically has about 15 tonnes of activated carbon distributed in the tanks. The CIP tankage provides about 5 hours of retention time with the gold loaded carbon routinely advanced to the strip circuit.

17.7 Carbon Elution and Electrowinning

The loaded carbon is stripped at atmospheric pressure with a heated solution of cyanide and alcohol over an average of three days. Gold is collected on stainless steel cathodes in a single electrowinning cell.

17.8 Gold Refining

The gold recovered by electrowinning from the CIP circuit and the gold recovered by gravity is periodically refined in a gas-fired furnace and poured in doré gold bars on site.

17.9 Carbon Regeneration

To maintain the activity level of the carbon inventory, the Seabee mill has a carbon regeneration process. Prior to elution, the carbon is washed in hydrochloric acid for removal of calcium and other acid soluble impurities. Following elution, the carbon is subjected to heat treatment and attrition in a rotary kiln and screened to remove fines prior to recycle to the CIP circuit.

17.10 Mill Tailings

The tailings from the Seabee mill were pumped to the East Lake basin until 2004. The operation then started deposition in a dam developed on Triangle Lake, which is slotted to provide capacity until 2021. The operation is currently evaluating alternatives to Triangle Lake to provide capacity for the life of the mine beyond 2021. All tailings solutions in excess of the mill recycle water that are released to the environment are treated with cyanide destruction to maintain the water quality below release quality standards.

The mill operates primarily on recycled water with 96 percent of the mill water requirements recycled within the grinding circuit and from reclaim water from the tailings management area.

17.11 Metallurgy

Historic recovery at the Seabee mine was in the 94 to 96 percent range, with routine low levels of losses both in the tailings solids and solution. The gold association with sulphide minerals is evident, and historically approximately 40 percent of the gold responded to gravity recovery. In recent years the mill began processing increasing levels of ore from the Santoy deposit with slightly improved metallurgical results and reduced cyanide consumption. Comparative analysis of the mineralization shows decreasing amounts of sulphide in the ore being mined at Santoy.

The future recovery estimates of 96.5 percent are based on the recent mill performance with mill recoveries of more than 96.5 percent. These improvements are attributed to the better condition of the leach equipment as well as the restored leach capacity. This improvement will also be supported by the expanded capacity of the gravity circuit and the reduced gold to be recovered in the leach and CIP circuit.

18 Project Infrastructure

The major infrastructure at the Seabee mine is shown in Figure 18, Figure 19 and Figure 20 and includes:

- Roads and airstrip.
- Mill buildings and related services facilities including maintenance and truck shops, assay lab, crushing plant, shops and storage buildings, and miscellaneous infrastructure.
- Shaft and headframe.
- Portal.
- Ventilation raises.
- 2-B mine water management ponds.
- Administrative buildings.
- Water supply and distribution.
- Waste management.
- Fuel storage.
- On-site explosive storage.
- Powerhouse and electrical distribution system.
- Ore stockpile.
- Tailings management facilities and water management.
- East Lake water treatment plant.
- Camp accommodation.
- Winter road portages.

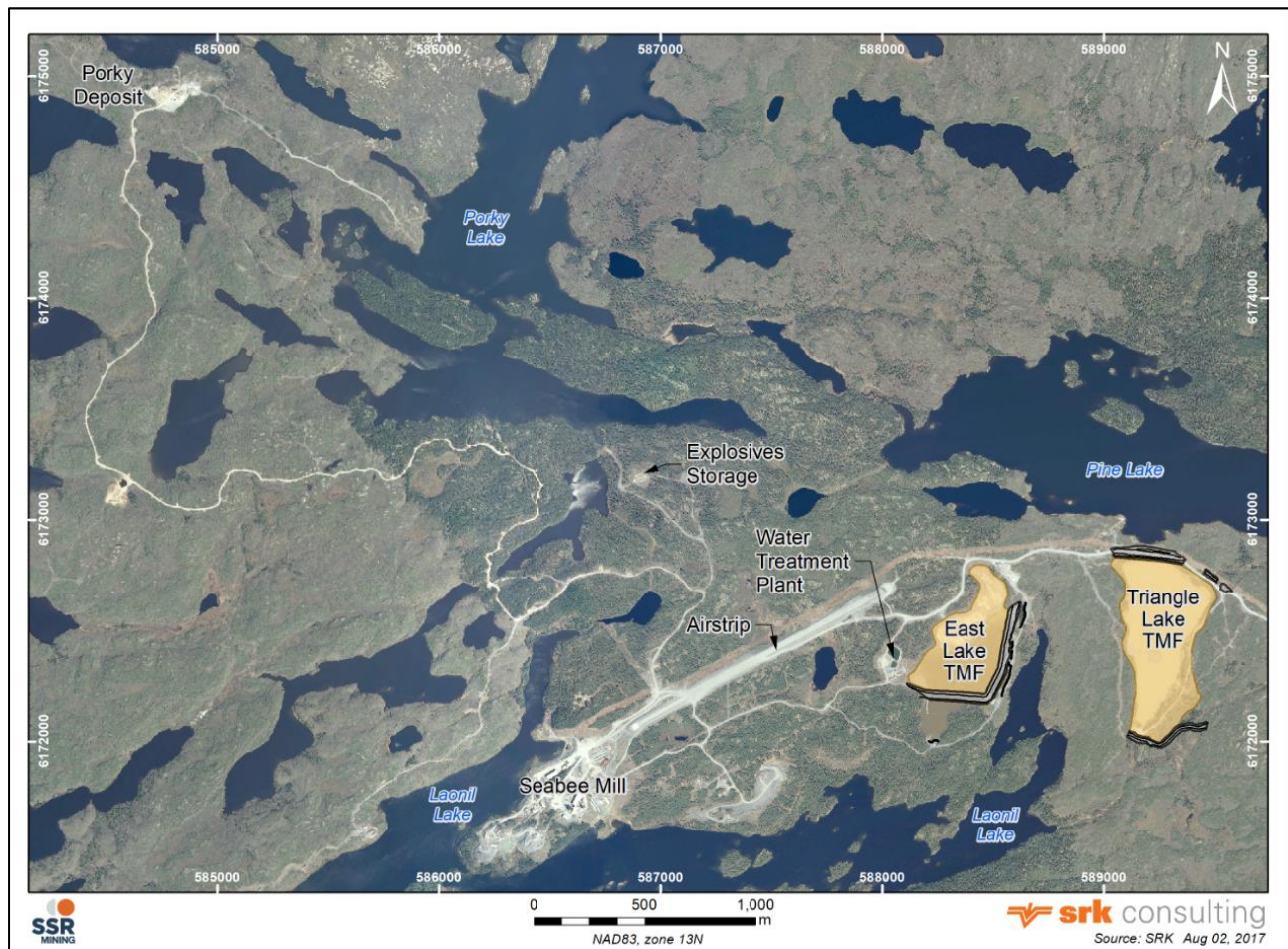


Figure 18: Seabee Mine Major Infrastructure



Figure 19: Seabee Mine (Mill Site Infrastructure)



Figure 20: Seabee Gold Operation Tailings Management Facility Infrastructure

The major infrastructure at the Santoy mine is shown in Figure 21 and includes:

- Roads.
- Administrative and shop buildings.
- Powerhouse and electrical distribution system.
- Camp accommodation.
- Portal.
- Vent raises.
- Ore stockpiles.
- Waste rock pile.
- Settling ponds.
- Water treatment plant

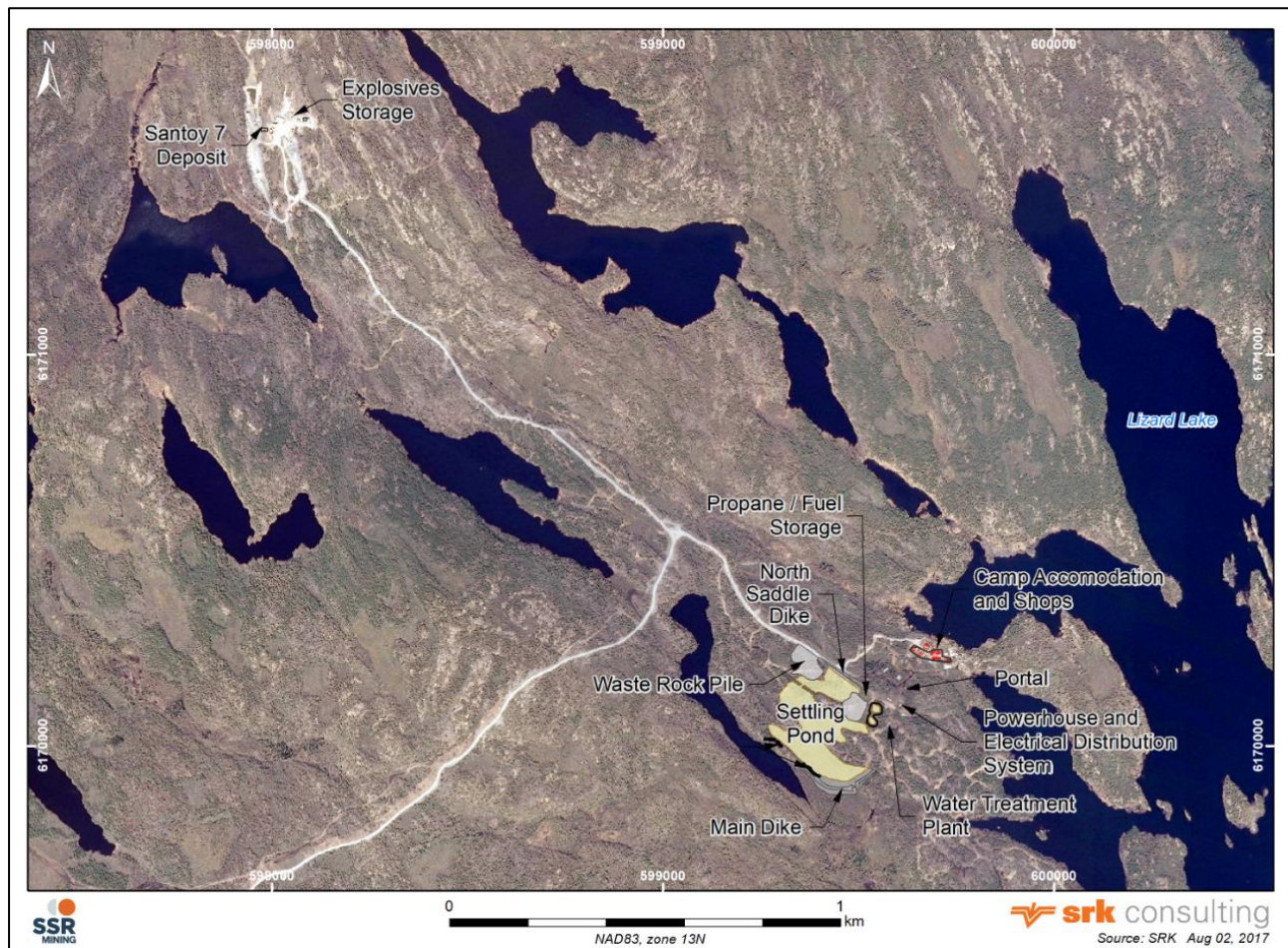


Figure 21: Santoy Mine Major Infrastructure

18.1 Site Access Roads

As previously stated, the site can be accessed by a winter road, which begins at Highway 102 near the community of Brabant Lake, Saskatchewan and consists of eleven portages. The majority of annual supplies required to run the Seabee Gold Operation are transported to site via the winter road typically throughout the months of January, February, March and until the 15th of April depending on ice quality.

The two mines are connected via a 14-kilometre haul road, called the Santoy Road. This access road is a one-way road that is operated using radio call-outs every 1-kilometre and has specific travel convoy times throughout the day. There are also several miscellaneous roads throughout both the Seabee mine and Santoy mine sites that provide access to infrastructure.

18.2 Product Loadout

The product from the processing facility (doré bars) is transported by air to a third-party refinery.

18.3 Utilities

The current camp facilities at the Seabee mine and Santoy mine can accommodate 201 and 22 employees, respectively, for a combined total of 223 employees site-wide. The Santoy mine camp is currently not in use; however, it is scheduled to be utilized later in 2017 and thereafter to accommodate an increase in workforce.

18.3.1 Water

Potable water is obtainable locally through SSR Mining's potable water system at both the Seabee and Santoy mine sites. The site uses a slow sand filter system, which accommodates the current camp; however, upgrading the system to a nanofiltration/reverse osmosis system may be considered should the camp size increase.

18.3.2 Sewage Disposal

At the Seabee mine, sewage is treated in the mill and discharged with the tailings to either the East Lake tailings management facility (East Lake TMF) or Triangle Lake tailings management facility (Triangle Lake TMF).

The septic system at the Santoy mine is a mound system, which is pumped every second day by a vacuum truck to prevent leakage from the system. There is a new septic system onsite, which is scheduled to be installed in 2018.

18.3.3 Power

Electrical power is provided by a transmission line to the mine by the provincial power authority, Saskatchewan Power Corporation. The mine is connected to a 138-kilovolt hydroelectric power line from Island Falls.

Based on amperage readings taken from the protection relays on March 18, 2017, the total power usage for the combined Seabee mine and Santoy mine is approximately 7.5 megawatt amperes. The electrical distribution system has an installed capacity of 10.0 megawatts.

18.3.4 Fuel Storage

Fuel farms and propane tanks are located at both the Seabee mine and Santoy mine sites.

18.3.5 Explosives Storage

For the Seabee mine site, magazines and explosives are stored in a designated area situated just off the Porky access road, approximately 1.3 kilometres northeast from the Seabee mill area. A second magazine and explosives storage area is at the Santoy 7 deposit. Both of these areas have been designed and prepared in accordance with the Mines Regulations (The Mines Regulations 2003, *Saskatchewan Employment Act*).

18.4 Tailings Management Facilities

There are currently two tailings management facilities that are being utilized by the Seabee mill: the East Lake TMF and the Triangle Lake TMF, as shown in Figure 20. Tailings deposition alternates between the two tailings management facilities where winter deposition occurs in the Triangle Lake TMF and summer deposition is in the East Lake TMF. The current remaining storage capacities of both facilities, based on an average production rate at 920 tonnes per day, will potentially reach maximum capacity at the beginning of 2021.

Maximum capacities are also under the assumption that 200,000 cubic metres of water are treated and discharged from the tailings management facilities each year. To ensure the treatment volumes are attained, a new water treatment plant at East Lake TMF was constructed in 2017.

18.4.1 East Lake TMF

East Lake was a natural lake that was converted to a tailings management facility when the Seabee mine was initially developed in 1991. East Lake was partially dewatered prior to tailings deposition, which provided containment for the first six years of operation. Subsequently, vertical concrete dams lined with high density polyethylene (HDPE) were constructed along the topographic lows along the east and south flanks of the tailings management facility to provide additional storage capacity up to mid-2004. At this time, tailings deposition was relocated to the newly constructed Triangle Lake TMF. To accommodate an increased mine life, further expansion of the East Lake TMF was implemented in 2015. The expansion consists of a 6-metre high expansion dike that is comprised of waste rock. Stage 1 construction of the expansion dike (Crest elevation 463.0 metres) was completed in 2016 and three additional raises are planned in 2017, 2018 and 2019 until the dike reaches its final elevation at 466 metres.

Embankments

The initial embankments at the East Lake TMF consisted of five vertical reinforced concrete dams: Dams 1, 2A, 2B, 2C and 3. All of these structures were founded on a prepared bedrock foundation that consisted of a grout curtain and cleaning of the bedrock surface. The upstream face of the concrete was lined with 60-mil HDPE liner to limit seepage at the bedrock interface. Details of each of the concrete dams are provided in Table 21.

Table 21: East Lake TMF Concrete Dam Dimensions

Structure	Length (m)	Width (m)	Height (m)	Crest Elevation (masl)
Concrete dam 1	122.0	0.6 to 1.0	5.0	460.0
Concrete dam 2A	190.0	0.6	1.7	460.0
Concrete dam 2B	39.5	0.6	0.8	460.0
Concrete dam 2C	30.0	0.5	0.4	460.0
Concrete dam 3	48.5	0.6	2.0	460.0

The expansion of the East Lake TMF above an elevation of 460 metres consisted of constructing a perimeter rockfill dike approximately 950 metres in length, which now has a crest elevation at 466 metres. The structure is founded on the historically deposited tailings within the tailings management facility and has a total height of approximately 6 metres. The upstream and downstream slopes of the expansion dike have a grade of 2.5 Horizontal to 1.0 Vertical (H:V). The dike has a

reverse “L” shape configuration, which provides tailings containment along the east and south flanks of the facility.

During its construction, high strength woven geotextile was placed along the south section of the dike to facilitate constructability as well as to help control differential settlement along the interface between the tailings foundation and dike. The upstream face of the dike includes a 16-ounce non-woven geotextile that acts as a filter to prevent tailings solids migration through the dike. The expansion dike was designed to retain tailing solids, not water; therefore, seepage is collected, contained and managed at four seepage collection areas at the downstream toe of the dike. Concrete Dams 1, 2 and 3 still serve as the primary containment for the East Lake TMF expansion. A typical section of the East Lake TMF containment structures is shown in Figure 22.

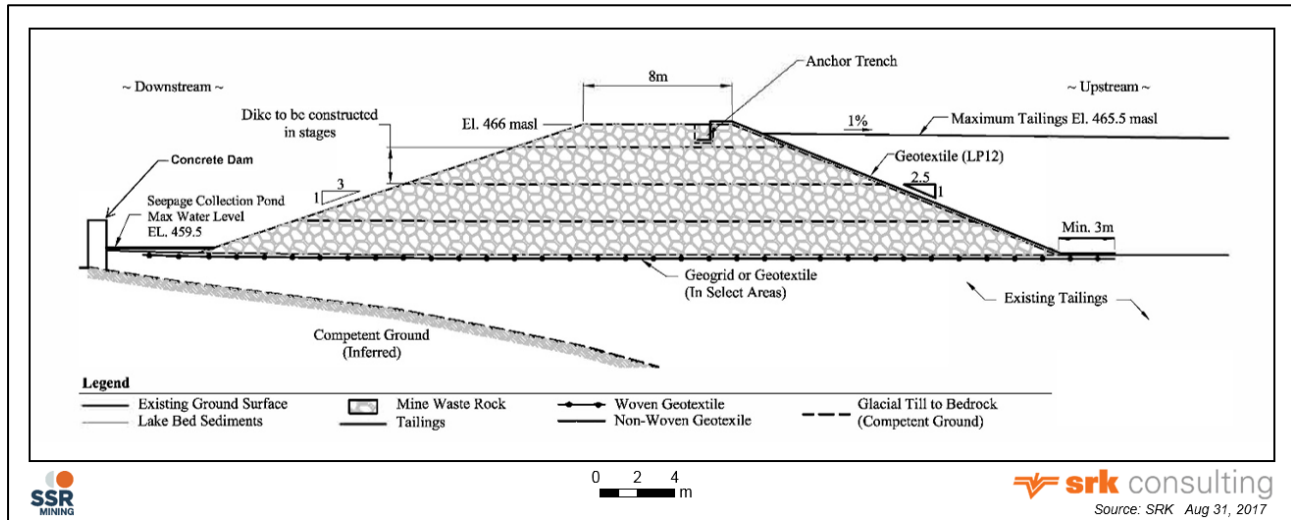


Figure 22: East Lake TMF Typical Cross Section through Embankment

Tailings Deposition

The existing tailings line is a 6-inch diameter HDPE pipe that is approximately 2.0 kilometres in length and stretches from the mill to the East Lake TMF. Spigot locations at the tailings management facility will vary over time in accordance with the Tailings Operations, Maintenance, and Surveillance (OMS) Manual (SRK 2017a).

Water Management

In regard to water management, supernatant water during tailings deposition in the East Lake TMF is regulated by a pump station situated at the northeast corner of the facility. The pond level is maintained below the maximum operating level by pumping and discharging supernatant to either the Back Pond or to the Triangle Lake TMF. There are also three fresh water diversion pumps situated along the western flank of the East Lake TMF that capture and divert water towards Laonil Lake.

18.4.2 Triangle Lake TMF

Similar to the East Lake TMF, the Triangle Lake TMF was a natural lake that was converted to a tailings management facility. To provide initial containment, a North dam was constructed along the northern shoreline of the tailings management facility and tailings deposition commenced in 2004. In

2007, the North dam was raised and the South dam was constructed along the southern shoreline of the tailings management facility. Both dams were vertical concrete structures lined with HDPE.

As part of the combined East Lake TMF and Triangle Lake TMF expansion to accommodate an increased mine life, the design of the Triangle Lake TMF was modified so that both structures would be raised with mine rock and lined with non-woven geotextile and HDPE liner. The expansion of the tailings management facility was staged, which also included construction of two saddle dikes: saddle dikes W2 and W2A, situated east of the North dam. The design of the saddle dikes was consistent with the raise to the North dam (*i.e.*, rockfill construction with non-woven geotextile and HDPE liner). In the final stage of construction, an emergency spillway was situated at the west abutment of the South dam, accommodating the design storm event for the tailings management facility.

The Triangle Lake TMF is currently constructed to its final permitted elevation at 460.1 metres, which in conjunction with the East Lake TMF expansion will accommodate tailings until the beginning of 2021.

Embankments

Both North and South dams were initially constructed using reinforced concrete to crest elevations 452.6 and 454.0 metres, respectively. These structures were founded on a prepared bedrock foundation that consisted of consolidation grouting and cleaning of the bedrock surface. Subsequent raises to these structures and construction of the saddle dikes were done using rockfill construction and lining the upstream slopes with 12-ounce non-woven geotextile and 60-mil HDPE liner. The upstream and downstream slopes of the containment structures were graded at 2.0H:1.0V. Details of each containment structure are provided in Table 22 and a typical cross section through the North dam is shown in Figure 23.

Table 22: Triangle Lake TMF Dam Dimensions

Structure	Initial Concrete Dam Crest Elev. (masl)	Length (m)	Height (m)	Crest Elevation (masl)
North dam	452.13	320.0	13.0	460.1
South dam	454	325.0	9.0	460.1
Saddle dike W2	N/A	100.0	4.0	460.1
Saddle dike W2A	N/A	50.0	1.0	460.1

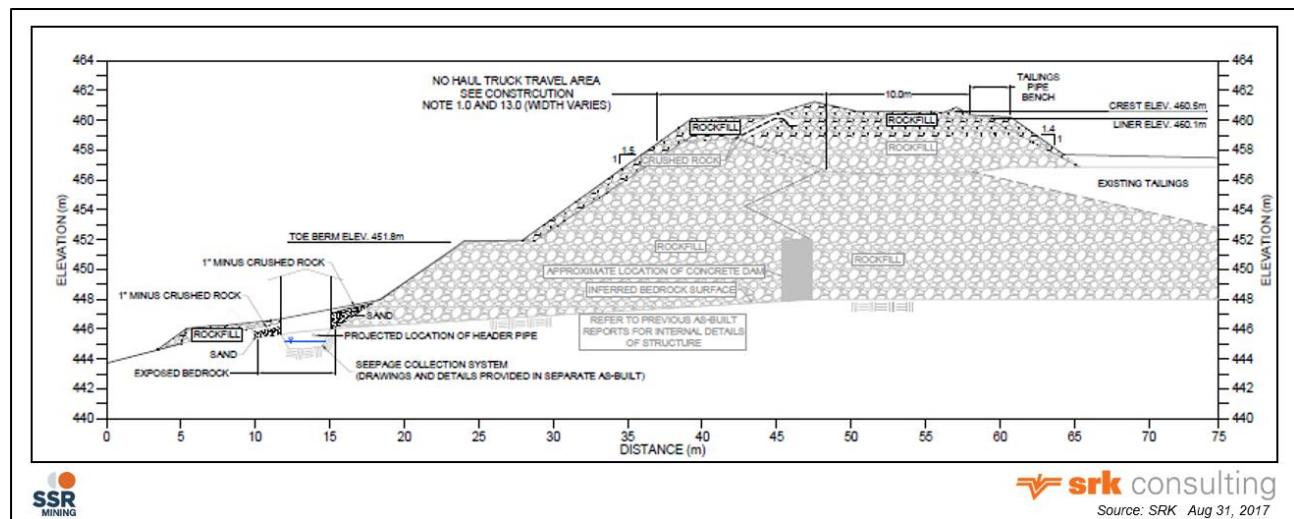


Figure 23: Triangle Lake TMF Typical Cross Section through North Dam

Construction of a seepage collection system commenced in the summer of 2014 along the downstream toe of the North dam to collect and manage seepage. In general, the work consisted of excavating a drainage channel in bedrock, constructing a French drain (comprised of non-woven geotextile, drain rock, perforated drain pipe with thermistor cable and riser pipes), placement of backfill above the French drain, installation of a heated sump, and installation of a pump and discharge line for continual pump-back of seepage to the Triangle Lake TMF.

Tailings Deposition

There is a 6-inch diameter HDPE pipe that connects to the tailings line at the East Lake TMF and extends approximately 1.2 kilometres to either the North or South dams at the Triangle Lake TMF. Spigot locations at the tailings management facility will vary over time in accordance with the Tailings OMS Manual (SRK 2017a).

Water Management

Water from the East Lake TMF is immediately discharged to the Triangle Lake TMF and thus the water repository and overall water management is accommodated and regulated at the Triangle Lake TMF. Reclaimed supernatant from the Triangle Lake TMF is discharged into the Back Pond, which serves as a lift station, where supernatant is either pumped to the East Lake water treatment plant for treatment or to the Seabee mill as reclaim. Two fresh water diversion pumps are situated along the eastern flank of the tailings management facility that capture and divert water towards Laonil Lake.

18.5 Waste Rock Structures

Access roads, the airstrip, dams, dikes, laydown areas and general site areas were constructed using waste rock, which were characterized as non-acid generating.

18.6 Proposed Quarry

In order to sustain waste rock requirements, SSR Mining plans to develop a rock quarry, scheduled to be operational in 2018, at the Seabee Gold Operation. The main consumption of the waste rock will be for the planned expansion of both tailings management facilities and for backfill material in open stopes at the Santoy mine. Waste rock will also be required for the Santoy Road upgrade/maintenance and a potential airport landing strip expansion. The location of the proposed quarry is expected to be adjacent to the existing Triangle Lake TMF.

18.7 Water Facilities

The Seabee mine has two water management structures: the East Lake water treatment plant and the 2-B mine water settling ponds. The Santoy mine has one water management structure, which is the Santoy 8 deposit water management pond.

Seabee Mine

The East Lake water treatment plant and associated settling ponds 1 and 2 are used to treat and settle the supernatant water from the East Lake TMF and Triangle Lake TMF. Supernatant is transferred from the Back Pond at the East Lake TMF to the water treatment plant where it is initially treated with lime, ferric sulphate, and peroxide. Subsequently, the treated water is discharged to settling pond 1, which overflows to settling pond 2. From here the treated water is pumped to East Pond where it is monitored prior to the final discharge to the environment. Settling ponds 1 and 2 have a

perimeter of approximately 190 and 100 metres, respectively, and a depth of 2.5 metres and 6 metres, respectively. The ponds are lined with 60-mil HDPE and have a combined storage capacity of approximately 13,000 cubic metres. Approximately 80,000 to 100,000 cubic metres are treated and discharged to the environment annually, which correlates to a treatment rate of approximately 835 cubic metres per day, based on a four-month treatment period.

As previously stated, a new water treatment plant was constructed in 2017. The new water treatment plant has capacity to treat up to 3,400 cubic metres per day. The new water treatment plant was designed to remove cyanide, ammonia and copper from the tailings management facility supernatant (the current plant cannot remove ammonia). In general, the treatment process consists of a pre-treatment step for removal of copper followed by a moving bed bioreactor unit for removal of cyanide and ammonia.

Mine water collected in underground sumps from the Seabee underground mine is pumped to surface and discharged into the 2-B settling ponds. The intent of 2-B Ponds 1 and 2 is to reduce total suspended solids prior to discharging the mine water into the stream that flows into Laonil Lake. Ponds 1 and 2 have a perimeter of approximately 100 and 130 metres, respectively, a maximum height of 9.5 and 5.0 metres, respectively. The ponds are lined with 60-mil HDPE and have a combined total storage volume of approximately 8,600 cubic metres. Approximately 700,000 cubic metres are discharged annually.

Santoy Mine

Mine water from the Santoy underground mine is discharged into the northwest corner of the Santoy 8 deposit water management pond where it is then pumped to a water treatment plant. The water is treated by a moving bed bioreactor unit to reduce ammonia concentrations. The treated water is pumped into settling pond 1 where biomass from the process settles out and from there water flows to settling pond 2 via an overflow spillway. The water is discharged from settling pond 2 through a culvert and into the north-east corner of the mine water management pond for final settling. Final discharge to the environment is done via a pump situated at the south end of the mine water management pond. Approximately 100,000 cubic metres of water from the underground mine is treated and discharged annually.

Settling ponds 1 and 2 have a perimeter of approximately 105 and 90 metres, respectively, and a maximum height of approximately 3.3 and 3.8 metres, respectively. The ponds are lined with 60-mil HDPE and have a combined total storage volume of approximately 2,250 cubic metres.

The mine water management pond is contained by a main dike situated at the south end of the facility and a north saddle dike located at the northwest flank. Both structures are comprised of waste rock with slopes graded at 2.0H:1V. The upstream slopes are lined with 60-mil HDPE, which are keyed into a low permeable till foundation. The main dike and north saddle dike are approximately 180 and 120 metres in length, respectively and have a maximum height of approximately 7 and 3.5 metres, respectively. The storage volume of the mine water management pond is approximately 40,000 cubic metres.

19 Market Studies and Contracts

The metal prices used in this Report are based on an SSR Mining internal assessment of recent market prices, long-term forward curve prices, and consensus amongst analysts regarding price estimates.

The Seabee Gold Operation currently produces doré bars. The doré refining terms are typical and consistent with standard industry practices and similar to contracts for the refining of doré elsewhere.

The doré is transported by secure freight to a refinery, refined into gold bullion and sold by SSR Mining to banks that specialize in the purchase and sale of gold bullion.

No external consultants or market studies were directly relied upon to assist with sales terms and commodity price projections used in this Report. The Qualified Person for this Section 19 agrees with the assumptions and projections presented.

19.1 Contracts

There are a number of acceptable refineries with capacity to refine doré. Currently, SSR Mining is in a non-exclusive contractual relationship with Asahi Refining Canada Ltd. (Asahi). The terms of this contract with Asahi are within industry norms. The cost for transport and refining of the doré is in accordance with industry standards.

20 Environmental Studies, Permitting, and Social or Community Impact

20.1 Regulatory Setting

The environmental assessment and permitting framework for mining in Canada is well established. Proposed projects are screened both federally and provincially to determine whether an environmental assessment under federal, provincial, or both levels of legislation is required. Following the assessment decision, the project advances to a licensing and permitting phase.

In the event the project's environmental assessment is successful and all necessary licenses and permits are granted, the project is then regulated through all phases (construction, operation, closure, and post closure) by both federal and provincial departments and agencies.

20.2 Federal Environmental Assessment Process

In the spring of 2012, the *Canadian Environmental Assessment Act* (1992) was amended and replaced by the *Canadian Environmental Assessment Act* (2012) (CEAA 2012). Two significant results of this amendment were the re-definition of what "triggers" a federal environmental assessment and the introduction of legislated time periods within a federal environmental assessment, if required.

Under CEAA 2012, an environmental assessment focuses on potential adverse environmental effects that are within federal jurisdiction including:

- Fish and fish habitat.
- Other aquatic species.
- Migratory birds.
- Federal lands.
- Effects that cross provincial or international boundaries.
- Effects that impact on aboriginal peoples, such as their use of lands and resources for traditional purposes.
- Changes to the environment that are directly linked to or necessarily incidental to any federal decisions about a project.

Under the CEAA 2012, there are two main methods in which a federal environmental assessment could be required:

1. A proposed project will require an environmental assessment if the project is described in the *Regulations Designating Physical Activities*, CEAA 2012.
2. Section 14(2) of CEAA 2012 allows the federal Minister of Environment to (by order) designate a physical activity that is not prescribed by regulation if, in the Minister's opinion, either the carrying-out of that physical activity may cause adverse environmental effects or public concerns related to those effects may warrant the designation.

20.3 Provincial Environmental Assessment Process

The provincial environmental assessment process begins with the submission of a technical proposal to the Saskatchewan Environmental Assessment Branch (EAB) of the Ministry of Environment (MOE) to determine if the project is considered a “development”. The MOE will coordinate an inter-ministry review of the technical proposal and the environmental impact statement using a standing panel of representatives from provincial departments and agencies, which is known as the Saskatchewan Environmental Assessment Review Panel (SEARP).

The Saskatchewan *Environmental Assessment Act* (SEAA 2013) states:

A “development” means any project, operation or activity or any alteration or expansion of any project, operation or activity, which is likely to:

- *have an effect on any unique, rare or endangered feature of the environment;*
- *substantially utilize any provincial resource and in so doing pre-empt the use, or potential use, of that resource for any other purpose;*
- *cause the emission of any pollutants or create by-products, residual or waste products which require handling and disposal in a manner that is not regulated by another act or regulation;*
- *cause widespread public concern because of potential environmental changes;*
- *involve a new technology that is concerned with resource utilization and that may induce significant environmental change; or*
- *have a significant effect on the environment or necessitate a further development which is likely to have a significant effect on the environment;*

20.4 Seabee Environmental Assessments

The Seabee Gold Operation has been in production since 1991. As part of the initial environmental assessment, approvals and the subsequent expansions at the operation, the existing environment was characterized in three environmental assessments, in accordance with the SEAA 2013. The initial environmental assessment focused on the original Seabee mine and mill and was completed in 1990 (Beak 1990). The second environmental assessment was necessary to assess the potential environmental impacts associated with the construction and operation of the Triangle Lake TMF and was completed in 2001 (KHS 2001). The third environmental assessment was necessary to assess the potential environmental impacts associated with the development of the Santoy mine and was completed in 2009 (Golder 2009). For each of these assessments, baseline data was collected and the potential environmental impacts associated with the proposed project were assessed. In all three environmental assessments, no significant potential environmental impacts were identified that could not be mitigated through the implementation of management plans. Subsequently, Ministerial Approvals to proceed to construction and operation were granted for each of the three environmental assessments.

The Triangle Lake TMF, as well as the Santoy mine projects, were screened by the Canadian Environmental Assessment Agency in 2001 and 2009, respectively. The Seabee Gold Operation has never required a federal environmental assessment.

20.5 Environmental Permits/Authorizations

Following a successful environmental assessment, the Seabee Gold Operation is required to obtain a number of federal and provincial permits/approvals/licenses. These permits outline the environmental operating specifications and reporting requirements of the operation. Although all regulatory permits and approvals carry the same level of importance, the Provincial *Approval to Operate* is the primary regulatory approval required to operate a gold mine in Saskatchewan. The Approval to Operate is issued in accordance with numerous provincial legislation and regulations governing Saskatchewan's mining industry.

Since its inception, the Seabee Gold Operation has operated under the terms and conditions of an Approval to Operate, issued by the MOE. As discussed in Section 4.3, the operation's current Approval to Operate number PO16-002, was issued in January 2016 and expires in September 2019. This approval outlines all monitoring and reporting requirements for all operations, including:

- Surface and groundwater in immediate and surrounding areas.
- Sediment quality of surrounding lakes.
- Aquatic biota in surrounding lakes.
- Facilities and areas requiring daily, weekly and monthly inspections.
- Regular acid rock drainage/metal leaching testing.
- Annual geotechnical inspection by a Professional Geotechnical Engineer.
- Development and regular updates to a variety of management plans.

The Seabee Gold Operation is in compliance with the terms and conditions of this approval.

20.6 Environmental Considerations

As discussed in Section 18, there is a quarry construction project planned for the Seabee Gold Operation. This project will require an environmental assessment screening by the EAB.

In parallel with the development of the engineering designs for the quarry, additional environmental baseline information was gathered to augment the existing environmental baseline database. These studies, completed in 2016, include:

- Heritage Resource Impact Assessment (CanNorth 2016a).
- Vegetation Inventory Study (CanNorth 2016b).
- Seabee Mine Quarry Rock ML/ARD Assessment (SRK 2016a).

Following the completion of the above studies and the integration of those results with the existing baseline database developed for the operation as a result of its three previous environmental assessments, a self-screening of the proposed quarry was completed. The results of the self-screening concluded that it is unlikely that the quarry project will require a formal environmental assessment.

Solid non-hazardous waste generated at the site is disposed of in the approved landfill. In accordance with the Seabee Gold Operation's *Approval to Operate*, hazardous wastes are stored in approved facilities at the site until the winter, when these materials are transported off site for disposal at approved hazardous waste disposal facilities. In addition, recyclable materials such as scrap metal are stored in segregated piles on an approved lay down area, and later transferred off site as backhaul material on emptied supply trucks via the winter road.

Sodium cyanide, ferric sulphate, lime, hydrogen peroxide, diesel, gasoline, propane, and all other consumables are transported to the site via truck over the winter road, which is generally operational from the end of January through to the end of March each year. All consumables are transported to the site in accordance with the Transport Canada *Transportation of Dangerous Goods Regulations* and stored in approved bulk storage facilities in accordance with the Seabee Gold Operation's *Approval to Operate* and Saskatchewan's *Hazardous Substances and Waste Dangerous Goods Regulations*.

Some spills of hydrocarbons and reagents have occurred at the Seabee Gold Operation. In each case, the appropriate spill response activities were implemented, resulting in short- and medium-term cleanup of the spilled material, followed by longer term monitoring of the spills for potential residual environmental impacts. Where necessary, adjustments were made to the Seabee Gold Operation's *Emergency Response Contingency Plan* to prevent similar spills from occurring again.

SSR Mining has characterized mine rock and tailings for the potential of acid rock drainage/metal leaching at the Seabee Gold Operation since 2012. The results of these analyses are reported to the MOE as part of the operation's annual reporting commitments. Similar programs will be refined and periodically carried out as operations continue. To date, the findings indicate that the mine rock is non-acid generating. All ores mined at the Seabee Gold Operation have a low sulphide content, which is consistent with most vein hosted gold deposits. The current data set shows the Santoy ores carry a lower sulphide content than the ores of the Seabee mine. From a geochemical perspective, this means the tailings with the higher sulphur content are located in the lower elevations of the tailings facilities, which are typically saturated or partially saturated. These tailings are then covered stratigraphically by the Santoy tailings through continued operation. The Santoy tailings display the lowest sulphur content (less than 1 percent) and an equivalent balance of carbonate content, meaning that the residual sulphur content after the carbonate is consumed in the neutralization process, would not likely support acidic drainage from the upper-most layers of tailings in both facilities. Thus, tailings found in the unsaturated zones of the facilities that will be more readily oxidized are the most geochemically stable tailings. Following 25 years of operation, the site continues to display no evidence of acid drainage.

The geochemical characterization to date, combined with the tailings operational plan, which ensures that at closure, the unsaturated zone consists of low sulphur bearing tailings, supports the current closure plans for these facilities.

There are no known environmental concerns at the Seabee Gold Operation that cannot be successfully mitigated through the implementation of the various approved management plans that have been developed based on accepted scientific and engineering practices.

20.7 Mine Closure

In accordance with Saskatchewan's *Mineral Industry Environmental Protection Regulations* (1996), the Seabee Gold Operation has, since 1996, submitted to the MOE a decommissioning and reclamation plan (closure plan) and cost estimate to implement this plan every five years or when required by the Ministry. In accordance with these regulations and the site's *Approval to Operate*, this closure plan is required to be revised and submitted for review and approval at least every five years or as requested by the MOE. The most recent closure plan (*Seabee Gold Operation Preliminary Decommissioning and Reclamation Plan, 2016 Update*), that was submitted in January 2017 and remains under review, meets the following objectives:

- Complies with previous environmental assessment and existing commitments as outlined in the Seabee Gold Operation's *Approval to Operate*.

- Meets the MOE's final mine closure objectives as outlined in the *Guidelines for Northern Mine Decommissioning and Reclamation* (SMOE 2008), specifically:
 - Leaves all disturbed areas safe for traditional land uses and in an ecological condition that is consistent with the surrounding physical and biological environment.
 - Leaves the site in a state that requires minimal or no maintenance.
- Eliminates potential short- and long-term health, safety and environmental risks associated with any aspect of the site.
- Ensures long term physical stability of all landforms and containment structures, in accordance with the *Canadian Dam Association Guidelines*.

The total estimated cost to implement the closure plan through an independent contractor is approximately C\$7.2 million. SSR Mining, in accordance with the *Mineral Industry Environmental Protection Regulations*, is responsible to post financial assurance equalling the closure cost estimate with the Government of Saskatchewan.

In accordance with the EAB guidance, effluent discharges from the site during the implementation of closure activities will meet Saskatchewan *Effluent Quality Limits*. Final decommissioning and reclamation water quality objectives for the site, which are determined jointly by the operator and the MOE, will be met at the site prior to the Ministry's acceptance of the property into its *Institutional Control Program*. The previously approved closure plan and its current reiteration, which is under final review, assume these final water quality objectives will meet Saskatchewan *Environmental Quality Standards for Surface Water* guidelines which are more stringent than Saskatchewan's *Effluent Quality Limits*.

The total estimated cost to implement the closure plan (under existing site conditions as of December 2016) through an independent contractor is approximately C\$7.2 million. The closure cost estimate allows for the full life cycle of mine closure, which includes the following three phases: 1) a decommissioning and reclamation phase to complete the closure activities; 2) a transitional phase to allow for the monitoring of all decommissioning and reclamation activities, ensuring that all closure criteria have been met; and 3) an institutional control phase. Saskatchewan's *Institutional Control Program* requires funds to be set aside for maintenance and monitoring during a 70-year period, and requires additional funds to manage the maintenance that may occur as a result of unforeseen events. SSR Mining, in accordance with the *Mineral Industry Environmental Protection Regulations*, is responsible to post financial assurance equalling the closure cost estimate with the Government of Saskatchewan, covering the three phases of mine closure.

The proposed closure activities for the main components of the Seabee Gold Operation, as described in the *Seabee Gold Operation Preliminary Decommissioning and Reclamation Plan, 2016 Update* are summarized below.

Mill, Headframe and Supporting Infrastructure

All infrastructure will go through a systematic process of decontamination of potential hazardous wastes. All assets will be removed and staged on site for transport off site. The remaining structures will be demolished with the use of heavy equipment and recyclable metal will be segregated and stored for transport off site. The soils, if present under and around the foundations, will be characterized for potential contamination of hydrocarbons or metals. If contamination is identified the extent will be delineated and removed for disposal or onsite remediation in accordance with the applicable regulations. All non-recyclable demolition debris will be buried or disposed of in a designated area on site.

Tailings Management Facilities and Water Treatment Sludge

Each facility will be decommissioned and reclaimed using a dry cover, graded towards a spillway, located at the south end of each of the tailings facilities. A 0.3-metre cover of erosion-resistant mine rock will be placed on the tailings to form the final cover. This rock cover will mimic the grading of the underlying tailings and eliminate the migration of windblown tailings from the facilities. Dams are constructed of erosion-resistant rock fill and no further closure activities are proposed. The dams are designed and operated in accordance with the guidelines of the Canadian Dam Association, which are reviewed and approved by the MOE. All closure activities associated with the containment structures will comply with the guidelines of the Canadian Dam Association (CDA 2013).

The plan and costing allows for water treatment to occur until such time as the quality of any remaining ponded water meets site specific water quality objectives.

Water treatment sludges at the mine are relatively small in volume. Following the decommissioning and reclamation of the water treatment plant, the sludges will be covered in place with a till cover or a combination of a liner/till/sand/mine rock cover.

Mine Rock and Ore Stockpiles

No mine rock associated with the Seabee Gold Operation is characterized as potentially acid generating, and therefore the closure objective is to ensure long-term physical stability of the piles. The largest single source of mine rock in a central location forms the foundation of the airstrip. All of this material will be used as the construction material for the tailings facility covers. A portion of the remaining mine rock will be used as cover material for the clean demolition debris and backfill material for the existing portals and mine openings, where appropriate. Any remaining mine rock not used as construction material in the decommissioning and reclamation activities, will be contoured to a 3:1 slope and allowed to naturally revegetate.

Prior to the completion of operations, all ore stockpiles will be processed.

Contaminated Soils

In the event hydrocarbon contaminated material is identified, the material will be excavated and land farmed in a designated area. Any liquid product produced from the land farm will be transferred into drums and sent offsite for disposal in a licensed facility or used in the waste oil burner.

Due to the low sulphide nature of the orebody, and the clean characterization of the mine rock, soils containing metals that exceed Canadian Council of Ministers of the Environment *Canadian Environmental Quality Guidelines* are not expected to be encountered; however, should they be, the material will be hauled to and disposed of within the tailings facility.

Non-Hazardous Waste Landfill

The current operating procedures for the landfill call for progressive reclamation. Following placement of refuse, it is covered with mine rock. At closure, all slopes of the covered landfill will be contoured to a minimum of a 3:1 slope.

Water Treatment Plants

The Santoy mine will be allowed to flood naturally following operations, and therefore the Santoy water treatment plant will be decommissioned. Its components will be either transported off site as assets or disposed of on site as non-hazardous waste.

The East Lake water treatment plants will remain operational throughout the decommissioning and reclamation activities until such time as further water treatment is not required. Following the need for water treatment, the plants will be dismantled and removed from site.

Mines

Following completion of production, all rolling stock will be removed from the underground stored at the staging area and prepared for transportation off site for either resale or salvage. The underground workings will be inspected and all hazardous wastes and dangerous goods will be transferred to surface and ultimately off site for disposal at an approved facility. Following this recovery of assets and decontamination, the mines will be allowed to flood naturally.

There are 12 vertical to sub-vertical vent raises and one shaft associated with the Seabee Gold Operation. Each of these openings will also be fitted with an engineered concrete reinforced cap keyed into bedrock, in accordance with accepted industry practices. The sub-horizontal openings (five portals) will be backfilled with approximately 15 metres of waste rock. The waste rock will be extended past the portal entrance and will be contoured to a slope of 3:1.

A final evaluation of all crown pillars will be completed as part of the engineering of the final closure plan. Crown pillars determined to pose a higher risk of failure will be collapsed as part of the decommissioning process. There are currently 17 crown pillars that do not pose a long term risk of failure, and six crown pillars which may require collapse and backfilling as part of the decommissioning and reclamation activities.

Miscellaneous Infrastructure

All roads, parking areas, lay down areas, settling ponds, winter road portages, and footprint of the air strip will be scarified to support revegetation following the removal of all culverts, power lines, pipelines and other miscellaneous infrastructure. This infrastructure will be disposed of as part of the major infrastructure decommissioning and reclamation plan.

Revegetation

The site will be revegetated in accordance with MOE's *Guidelines for Northern Mine Decommissioning and Reclamation* through a combination of natural and active revegetation.

20.8 Social and Community Impact

The Seabee Gold Operation is within the Treaty 10 area and borders the Pelican Narrows and Brabant Lake community areas of influence (SMOE 2003). These communities were consulted during the completion of previous environmental assessments in support of the project throughout its operating history. The socio-economic study area for the Santoy mine environmental impact statement (the most recent environmental assessment completed in 2009) included La Ronge, Air Ronge, Kitsakie IR 156B, Lac La Ronge IR 156, Nemeiben River IR 156C, Stanley Mission IR 157, Grandmother's Bay IR 219, Brabant Lake, Pelican Narrows IR 184B, Pelican Narrows, Sandy Lake, Southend IR 200, and Deschambault Lake IR 203.

In accordance with the terms and conditions of the operation's Surface Lease Agreement, continual effort has been made at the Seabee Gold Operation to engage the nearby communities in order to maximize northern employment opportunities as well as the local purchase of goods and services to support the mine. Currently, approximately 22 percent of the nearly 300 employees at the Seabee Gold Operation are northern Saskatchewan residents. The operation continues to honour its social commitments outlined in the project's surface lease agreement.

Since SSR Mining's purchase of the Seabee Gold Operation, a concerted effort has been made to maintain and strengthen the relationship with the surrounding communities, including the Lac La Ronge Indian Band and the Peter Ballantyne Cree Nation.

In addition, stakeholder engagement plans have been developed to support the proposed quarry. Engagement activities defined in these plans are currently underway.

20.9 Safety

The management of safety and health at the Seabee Gold Operation reflects the effective management of risk. The mine's safety and health strategy is two-fold: to ensure full compliance with the Saskatchewan *Mine Act* regulations; and to minimize residual risk in relation to regulatory compliance through a risk-centered safety and health management system.

Mining-related hazards are inventoried and characterized in terms of their risk, *i.e.*, development of a comprehensive risk registry. Controls, in the form of appropriate engineering and mine design, fixed and mobile equipment optimization, work processes, training and competency verification, and others, are implemented in relation to risks with proportional emphasis on catastrophic risk. Special emphasis is given to risks such as geotechnical, mine design and operational risk.

In addition to the central risk management framework, the mine employs a wide variety of policies, processes and procedures that populate the safety and health management system including, but not limited to, safety committees, daily workplace audits, safety communication, proper use of protective equipment, job hazard analysis and standard operating equipment, contractor management, a focus on behavior modification and human error, and incident investigation and root cause analysis, among others.

In instances where changes to risk management practices occur as a result of changes to mine equipment, practices, geotechnical information as well as other change criteria, the mine undertakes a change management review to ensure that those changes do not result in an increase in potential risk. Where change does result in additional risk, relevant control measures are modified.

While the Seabee Gold Operation's approach to risk management is primarily focused on the prevention of incidents, and has substantially reduced safety incidents, the operation also maintains a properly staffed, trained and provisioned mine rescue team that is prepared to address any foreseeable emergency that might occur underground or on surface. Dedication, and diligent preparation and training have resulted in provincial recognition for the mine's rescue team and system.

Seabee Gold Operation's safety and health management system, like all effective management systems, undergoes review of continuous improvement involving performance metrics and other training and leading key performance indicators. However, SSR Mining also recognizes that the system is only as effective as the organizational culture and the degree to which the system is adopted by its members as common practice. Accordingly, there is also recognition that the behavior of leaders at the mine has a substantial impact on the mine's operational culture. As such, the mine emphasizes culture assessment and enhancement through leadership development.

21 Capital and Operating Costs

This section summarizes the costs used by SRK to validate the economics of the Mineral Reserve estimate for the Seabee Gold Operation. The cost estimate was prepared by the SSR Mining technical department at both the Seabee Gold Operation site and Saskatoon office. SRK reviewed the assumptions, parameters, and methods used to prepare the cost estimate and is of the opinion that they are sufficient for the purposes of validating the economics of the Mineral Reserve.

The cost estimates were completed in C\$ and converted to US\$ at an exchange rate of C\$1.25:US\$1.00.

Cash costs and all-in sustaining costs (AISC) per payable ounce of gold sold are non-GAAP financial measures. Please see “Cautionary Note Regarding Forward-Looking Statements” in this Report

21.1 Capital Costs

The estimated capital costs required to achieve the Mineral Reserve life of mine are summarized in Table 23. The capital costs were estimated from historical construction costs and equipment purchase prices, actual development costs, as well as results from study work completed by SRK and third-party consulting firms. Where costs were not available for some minor components, an experience based allowance was included.

Table 23 represents the categorized capital costs estimated as of the beginning of 2017. In the first half of 2017, SSR Mining has already invested US\$5.7 million in capital projects.

The sustaining capital costs include:

- Surface infrastructure construction such as upgrades to the camp and kitchen, IT upgrades, and additional diesel storage capacity.
- Mill improvements such as a gravity circuit expansion to be completed in 2017.
- Tailings management facility construction such as the new water treatment plant and East Lake dam raises.
- Mobile equipment such as new and replacement purchases and major rebuilds based on the estimated hours of operation.

Table 23: Capital Costs Estimate

Cost Component	Value US\$ MM
Capital development	10.5
Sustaining capital	21.3
Capitalized exploration	2.8
Total Capital Cost	34.7

21.2 Operating Costs

The operating costs were estimated based on the actual operating expenditures at the Seabee Gold Operation in 2016. The costs were estimated by process/activity with fixed and variable components. Variable components are affected by drivers such as the size of the workforce, production tonnage, development advance, fuel consumption based on forecasted equipment hours, etc. Overall the operating costs are an approximate 60 percent variable to 40 percent fixed split.

The operating expenses estimated to validate the positive cash flow for the Mineral Reserve life of mine are summarized in Table 24. The mining expense includes all labour, supplies/consumables, and equipment maintenance to complete mining related processes/activities, less exploration diamond drilling and capital excavations and construction. The milling expense includes all labour and supplies/consumables to complete milling related processes/activities. The administrative expense includes all labour, supplies/consumables, and equipment maintenance to complete administrative, finance, human resources, environmental, safety, supply chain, site services, camp and kitchen, and travel related processes/activities.

Table 24: Operating Expense Estimate

Cost Component	Value US\$/t milled
Mine cost	68
Mill cost	21
Administrative cost	60
Operating Expense	148

* Sum of individual values may not match total due to rounding.

Cash costs, which include mining, processing and administrative costs (net of capital development), royalties and refining costs, total US\$624 per payable ounce of gold sold. AISC, which include infrastructure capital, capital development, capitalized exploration and reclamation, total US\$725 per payable ounce of gold sold.

For context, historical operating costs are summarized in Table 25.

Table 25: Historical Operating Costs

	Unit of Measure	2012	2013	2014	2015	2016
Ore milled	tonnes	275,235	280,054	279,597	277,368	312,679
Grade processed	g/t gold	5.86	5.11	7.32	8.82	7.91
Gold sold	gold ounces	48,673	44,823	62,772	72,699	50,446*
Cash Cost	US\$/ounce gold sold	998	954	757	525	639*

* Period from and after acquisition of Claude Resources by SSR Mining on May 31, 2016 to and including December 31, 2016.

22 Economic Analysis

Financial information has been excluded as SSR Mining is a producing issuer and the Seabee Gold Operation is currently in production.

SRK, through auditing the mining, milling, and site infrastructure plans and operating and capital cost estimations, confirms that the Mineral Reserve declared herein provides a positive cash flow given the technical and economic conditions at the time of writing this Report. Due to the nature of the mining business, these conditions can change significantly over relatively short periods of time. Consequently, actual results may be significantly more or less favourable.

23 Adjacent Properties

On October 6, 2016, SSR Mining announced the signing of an option agreement with Eagle Plains Resources Ltd. (Eagle Plains) to acquire up to an 80 percent interest in the Fisher project. The project consists of more than 34,000 hectares of land contiguous to the Seabee Gold Operation, directly north of the Seabee mine and southeast of the Santoy mine (Figure 24).

Gold mineralization on the Fisher project is currently found in four major areas, and within 16 kilometres of the Santoy mine. Mineralization observed on the Fisher project to date is similar to that of Santoy, where disseminated to coarse gold-bearing sheeted quartz veins occur along major ductile shear zones. Similar to the Seabee Gold Operation, the Fisher project is hosted within the Pine Lake greenstone belt, which is dominated by supracrustal rocks, including mafic volcanics, sediments, mafic intrusions and a range of felsic intrusions, of which some are directly associated with gold-bearing quartz veins.

Historic exploration work on the Fisher property, completed prior to 1987, identified several areas of interest. Notable results include chip samples at a grade of 12.6 g/t gold over 7.8 metres, a drillhole intercept at a grade of 10.0 g/t gold over one metre, and grab samples at a grade of 37.3 g/t gold. Prospecting by Eagle Plains in 2013 discovered the Fisher showing – a gold occurrence highlighted by a grab sample at a grade of 9.2 g/t gold.

SSR Mining completed an exploration program on the Fisher project in 2016, which involved soil sampling, mapping, trenching and geophysical surveying. The results will support future exploration through the identification of additional mineralized area and generating drill targets. An exploration budget of C\$400,000 was planned for the Fisher project in 2016. The southern extension of the Santoy shear zone onto the Fisher property is an underexplored gold target that occurs across a 10-kilometre-wide stratigraphic package, and is considered as part of future exploration on the property.

The all-weather road connecting the Santoy mine to the Seabee mill and processing facility ends one kilometre from the Fisher property boundary, making for ease of access to the area.

The SRK Qualified Person has not visited the Fisher property and are unable to verify this information. Although similar features have been observed between the Fisher property and the Seabee Gold Operation, the Fisher property is not necessarily indicative of the mineralization observed on the Seabee Gold Operation.

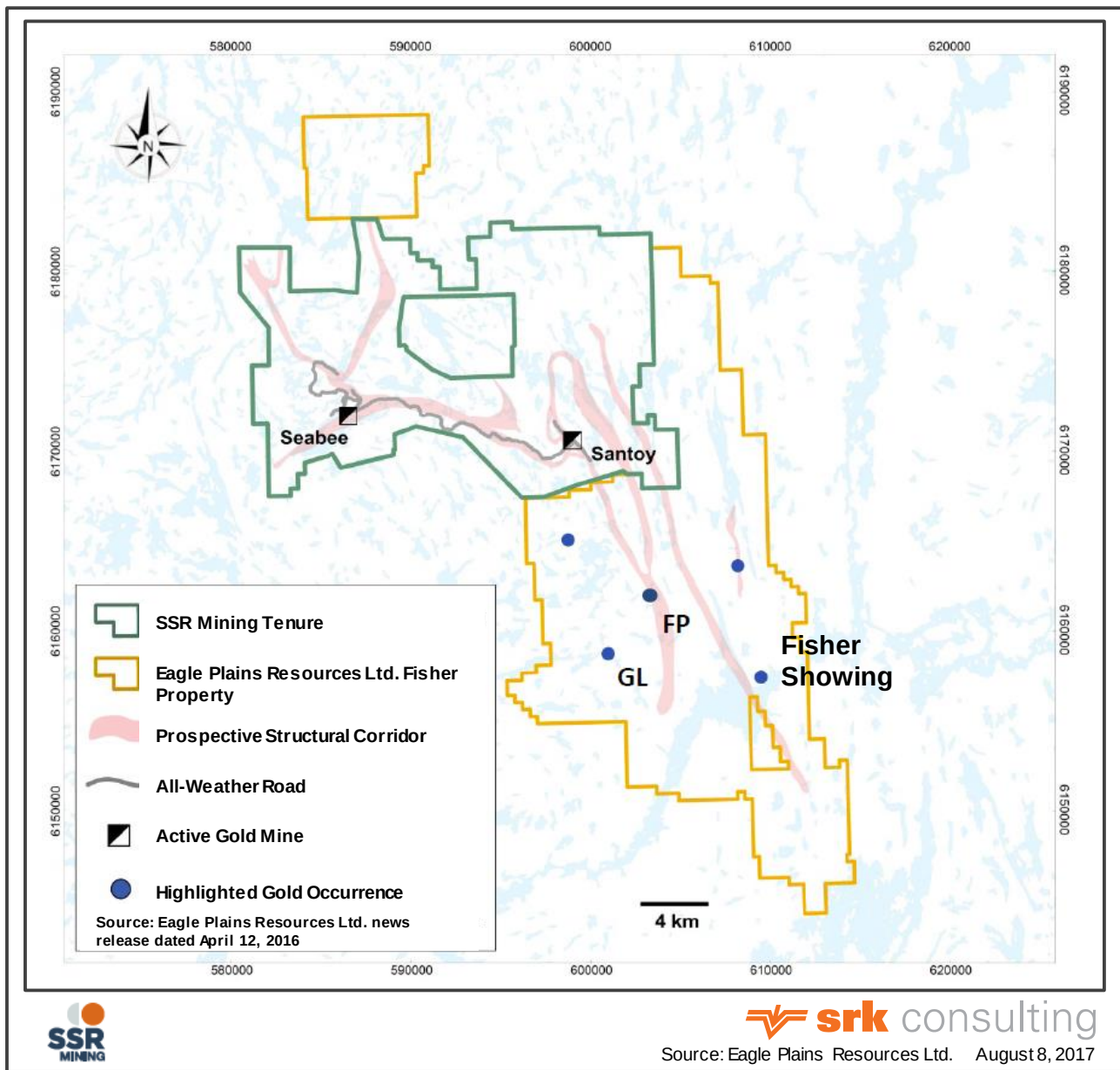


Figure 24: Location of the Fisher Property with Respect to the Seabee Gold Operation
 GL – George Lake, FP – Footprint Lake

24 Other Relevant Data and Information

This section summarizes the PEA based on a Seabee Gold Operation production plan that considers an expansion scenario and includes Inferred Mineral Resources in respect of such proposed expansion scenario. Based on SSR Mining's operating experience and investment in exploration to increase Mineral Resources at the Seabee Gold Operation since its acquisition in May 2016, the PEA contemplates the technical and investment requirements for, and demonstrates the economics of, a potential expansion to a sustained mining and milling rate of 1,050 tonnes per day. This results in increased gold production and decreased cash costs, over a seven-year operating period. Developing and evaluating this production plan assists SSR Mining in identifying potential strategic, long term direction for Seabee Gold Operation. For the sake of clarity, the entire PEA has been included in this Section. Technical information has been incorporated by reference where there is no difference between the PEA and the current Mineral Reserve life of mine plan, as set out below.

By including the Inferred Mineral Resource in the PEA production plan, a production rate of 1,050 tonnes per day can potentially be sustained until 2024. Overall, the PEA production plan, commencing July 1, 2017, includes 2.654 million tonnes at an average grade of 8.30 g/t gold (including dilution). The total gold delivered to the mill under the PEA is expected to be 708,000 ounces.

The PEA was initially completed by the SSR Mining technical department on site at the Seabee Gold Operation. SRK since reviewed the PEA and made the appropriate modifications to prepare the results for inclusion in this Report in accordance with NI 43-101. Much of the technical information for this PEA summary is identical to the material contained in other sections of this Report. For information regarding each of the following:

- Terms of reference, refer to Section 2.
- Reliance on other experts, refer to Section 3.
- Property description and location, refer to Section 4.
- Accessibility, climate, local resources, infrastructure, and Physiography, refer to Section 5.
- History, refer to Section 6.
- Geological setting and mineralization, refer to Section 7.
- Deposit types, refer to Section 8.
- Exploration, refer to Section 9.
- Drilling, refer to Section 10.
- Sample preparation, analyses, and security, refer to Section 11.
- Data verification, refer to Section 12.
- Mineral processing and metallurgical testing, refer to Section 13.
- Mineral resource estimates, refer to Section 14.
- Recovery methods, refer to Section 17.
- Market studies and contracts, refer to Section 19.
- Adjacent properties, refer to Section 23.
- References, refer to Section 27.

24.1 Cautionary Statement

This PEA is not adequate to confirm the economics of the study. A preliminary-feasibility study, or feasibility study, as defined in NI 43-101, containing Mineral Reserve estimates is required for this purpose.

Readers are cautioned that the projected mining method, potential production profile and plan and mine plan referred to in this PEA are conceptual in nature. There is no certainty that an economic outcome will be realized or that a production decision will be made. A mine production decision that is made without a feasibility study carries additional potential risks which include, but are not limited to, the inclusion of Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. Mine design and mining schedules, metallurgical flow sheets and process plant designs may require additional detailed work and economic analysis and internal studies to ensure satisfactory operational conditions and decisions regarding future targeted production.

This PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves. There is no certainty that the Inferred Mineral Resources will be converted to the Measured and Indicated categories, that the Measured and Indicated Mineral Resources will be converted to the Proven or Probable Mineral Reserves and there is no certainty that this preliminary economic assessment will be realized. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability; the estimate of Mineral Resources in this Report may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.

24.2 Mineral Reserve Estimates

A Mineral Reserve estimate has not been prepared as part of the PEA, as the production plan contains Mineral Resources classified as Inferred.

24.3 Mining Methods

The mining methods included in the PEA are similar to those described in Section 16 of this Report. Under the PEA, a total of 2.654 million tonnes at an average grade of 8.30 g/t gold are included in the production plan. Dilution is included in the Mineral Resources within the PEA production plan from overbreak in the hangingwall and footwall based on ongoing stope reconciliation. A total of 708,000 ounces of gold would be delivered to the mill.

An expansion scenario under the PEA contemplates that mining would occur at both the Seabee mine and Santoy mine in 2017 and 2018. After 2018, the Santoy mine would be the only source of feed until 2024, when the known Mineral Resource is exhausted and some lower value remnant mining is completed back at the Seabee mine. The production rate would ramp up gradually from 920 tonnes per day in 2017 to 1,050 tonnes per day in 2019 as additional mining fronts are established at the Santoy mine. To achieve the PEA production plan, 28,900 metres of capital and operating development would be required. Material would continue to be processed at the Seabee mill.

At the Santoy mine, the footprint expands from that described in the Mineral Reserve life of mine plan. Access underground from surface would still be maintained via the Santoy portal and main

ramp. Stopping would take place from 2 Level to as deep as 74 Level as shown in Figure 25. The stopes would be mined via longhole mining methods.

24.3.1 Ventilation

As mining continues wider along strike and deeper at the Santoy mine, the PEA contemplates that the ventilation system will be expanded by reactivating the system in the Santoy 8 deposit and deepening the fresh air raise systems at both the Santoy 8 and Gap deposits to the deepest levels. Total ventilation requirements based on estimated diesel-powered equipment fleet are approximately 165 cubic metres per second (350,000 cubic feet per minute). Major ventilation construction is expected to occur in 2020 when mining commences through the currently inactive Santoy 8 deposit workings.

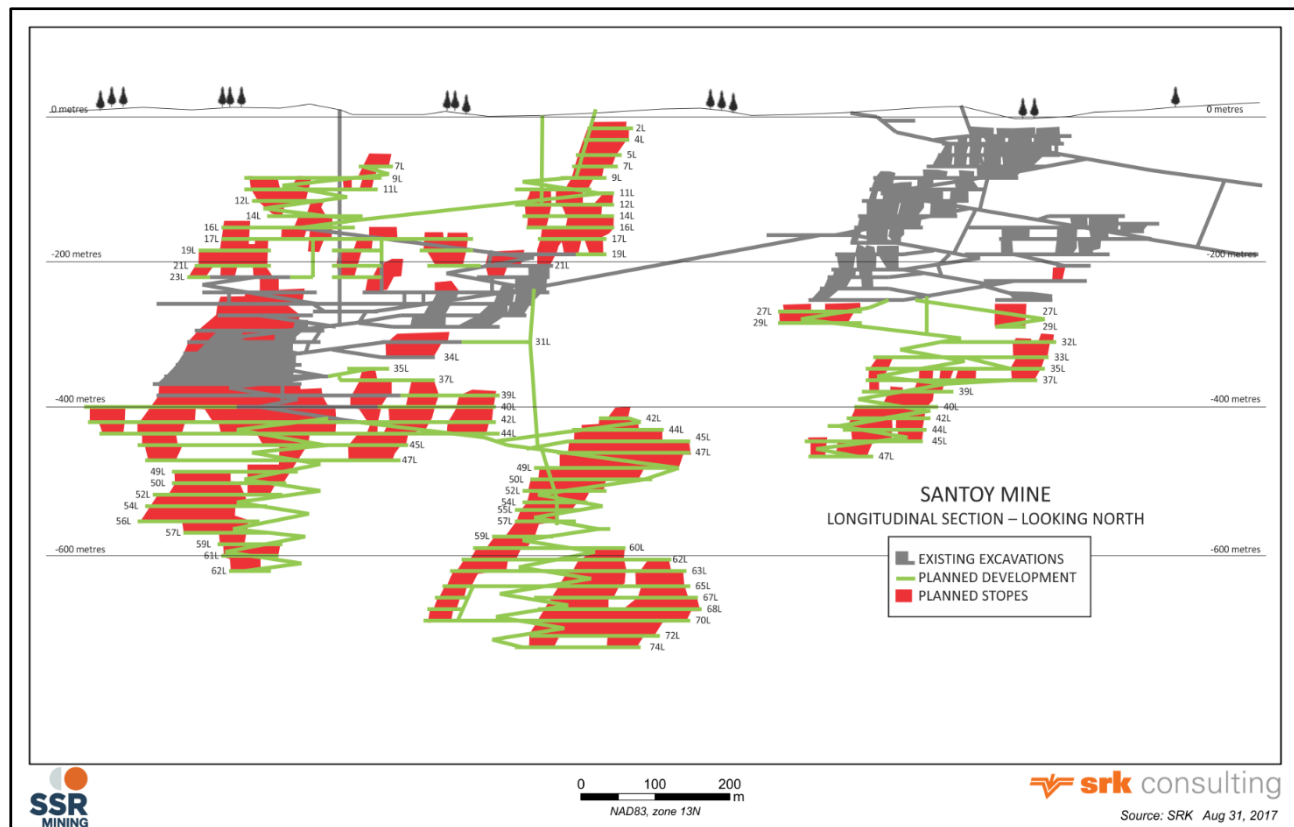


Figure 25: PEA Santoy Mine Longitudinal Section

24.3.2 Mineral Resources within the PEA Production Plan

The Mineral Resources within the PEA production plan are estimated using a cut-off grade of 3.65 g/t gold based on the following assumptions:

- Gold price of US\$1,250 per ounce
- Exchange rate of C\$1.25:US\$1.00
- Milling recovery of 96.5 percent
- Royalty of 3.0 percent
- Operating cost of C\$172 per tonne

Similar operating recovery and dilution factors discussed in Section 16 of this Report were applied to the Mineral Resources within the PEA production plan, based on ongoing stope reconciliation using actual mucking and cavity monitor survey data. The dilution factor equates to 0.18 metres of overbreak on each the hangingwall and footwall, grading 0.50 g/t gold. An operating recovery of 94 percent was applied to the planned stope outlines.

The total Mineral Resources processed in the PEA include 62 percent of the Inferred Mineral Resource estimate presented in Section 14 of this Report. The PEA does not impact the Seabee Gold Operation's current Mineral Resource and Mineral Reserve estimates effective as of December 31, 2016.

24.3.3 Mine Schedule

The PEA evaluates the expansion of the Seabee Gold Operation to a sustained mining and milling rate of 1,050 tonnes per day for a seven-year period. The PEA production profile tonnage and contained gold ounces are shown in Figure 26 and Figure 27.

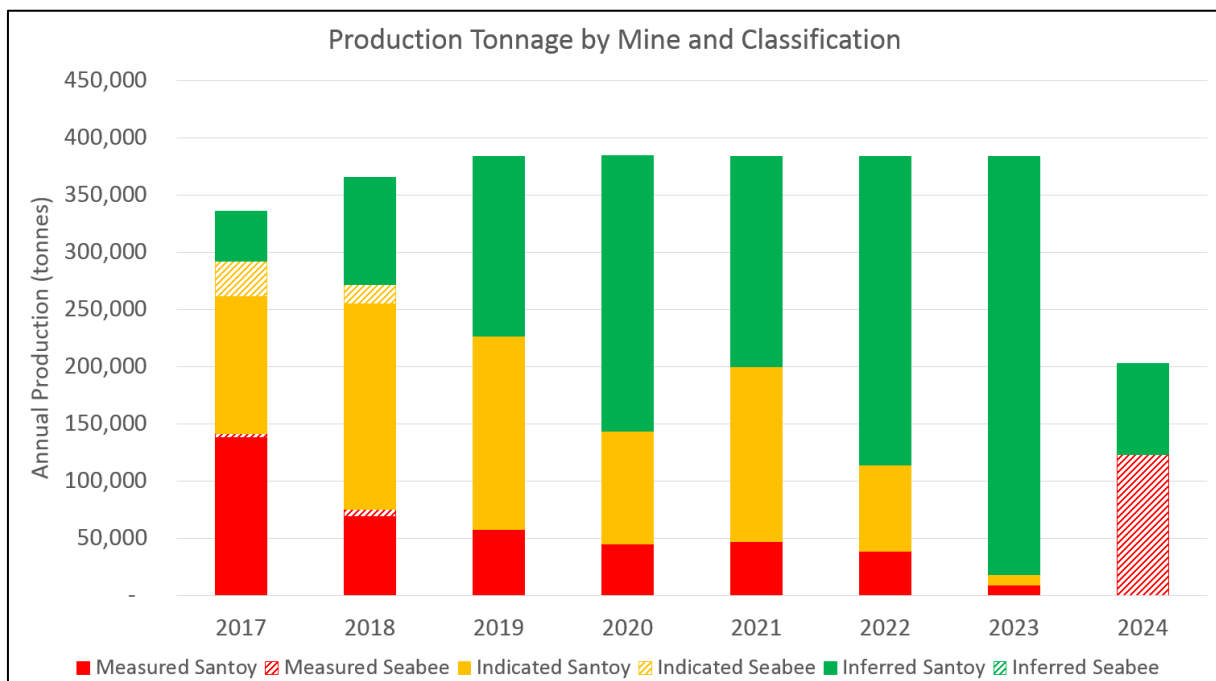


Figure 26: PEA Production Plan Tonnage

Production from entire 2017 shown for completeness

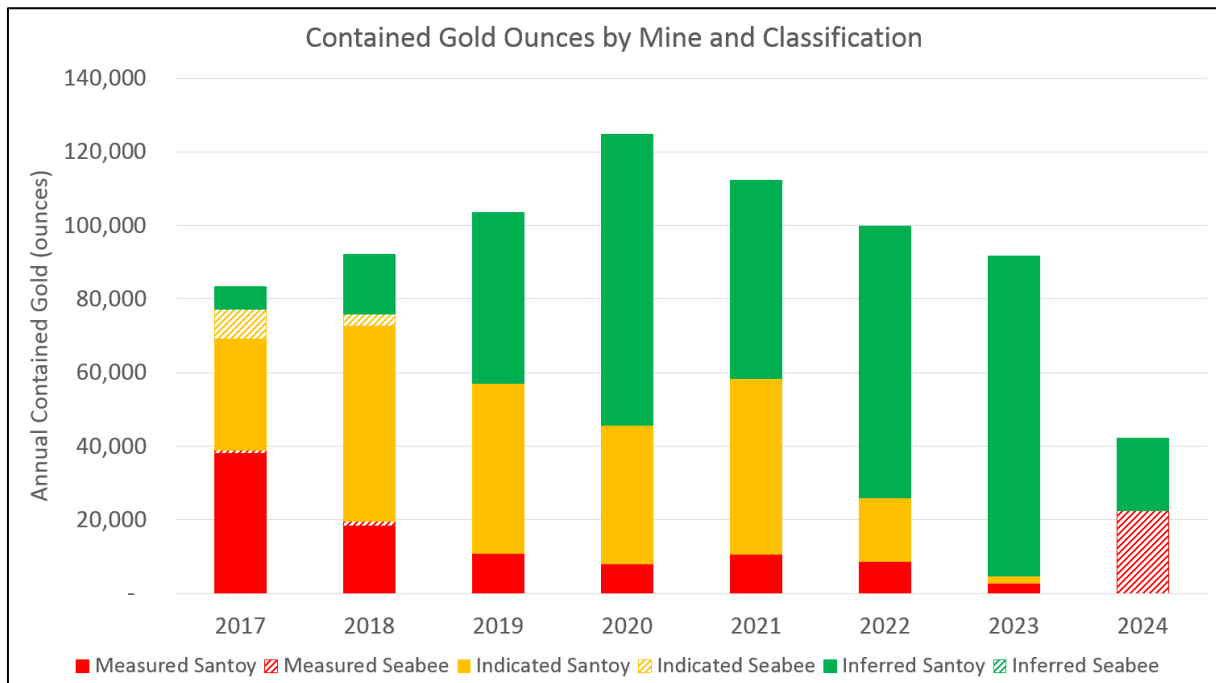


Figure 27: PEA Production Plan Contained Gold Ounces

Production from entire 2017 shown for completeness

The underground development required to achieve the PEA production plan is summarized in Table 26. Annual waste rock generation and backfill requirements are also included in Table 26.

Longitudinal sections of the annual production and development schedules for Santoy mine are provided in Appendix B.

Table 26: PEA Development, Waste Rock, and Backfill Summary

	Unit of Measure	H2 2017	2018	2019	2020	2021	2022	2023	2024	Total
Development										
Capital lateral	metres	1,000	3,000	2,700	3,000	2,200	1,900	200	0	14,000
Operating lateral	metres	1,000	2,500	2,100	1,500	2,800	1,600	700	0	12,200
Capital Alimak	metres	100	500	100	0	0	0	0	0	700
Operating Alimak	metres	400	500	700	200	200	0	0	0	2,000
Total		2,500	6,500	5,600	4,700	5,200	3,500	900	0	28,900
Waste rock generated	tonnes	100,000	255,000	215,000	210,000	185,000	155,000	15,000	0	1,135,000
Backfill requirement	tonnes	110,000	245,000	265,000	280,000	255,000	240,000	295,000	80,000	1,770,000

24.3.4 Mobile Equipment

The peak requirements for the primary mining mobile equipment fleet contemplated in the PEA are listed in Table 27. Beyond the current Mineral Reserve life of mine plan peak fleet, an additional 6-cubic yard LHD, underground haulage truck, and top-hammer drill are required as the haulage and drilling demand increases as mining advances wider along strike and deeper at the Santoy mine.

Table 27: PEA Peak Mining Mobile Equipment Fleet

Equipment	Fleet Size
6-cubic yard load haul dump	5
8-cubic yard load haul dump	2
40-tonne haulage truck	8
2-Boom jumbo	3
1-Boom jumbo	2
Top-Hammer production drill	2
Scissor deck	4
Alimak	3
Explosives loader	1
Fuel/lube truck	1
40-tonne dump truck (surface)	5

24.4 Project Infrastructure

A description of the current status of the major site infrastructure is provided in Section 18. The same improvements to the camp accommodation and kitchen, the IT/communication system, the mill, East Lake water treatment plant and dam raises are contemplated by the PEA.

Additional site infrastructure improvements are included in the PEA for the camp accommodation, the diesel storage, the Santoy mine electrical distribution, and a tailings facility expansion. The camp accommodations and diesel storage improvements are minor items. Another of the older, wood-constructed camp accommodation buildings will be replaced with a new modular unit in 2019 and additional diesel storage capacity will be installed in 2020 to meet demand from the increasing diesel-power mobile equipment fleet. The electrical distribution and new tailings facility improvements are more substantial and explained in more detail below.

24.4.1 Santoy Mine Electrical Distribution

Current power usage at the Seabee Gold Operation is approximately 7.5 megavolt amperes and is nearing the capacity of the existing 10.0-megavolt ampere main substation transformer. The combined increase in demand from additional surface infrastructure and the Santoy mine expansion contemplated by the PEA will require installation of additional capacity.

Eight options to address the additional capacity requirement were investigated in a feasibility study completed by Team Power Solutions (“Distribution System Upgrades for Santoy Gap Expansion” January 10, 2017). The preferred option involves creating a dual switched main substation. Two separate switches and transformers will be installed at the main substation, giving the Seabee mine, mill, and surface infrastructure and the Santoy mine and surface infrastructure their own separate 10.0-megavolt ampere power supplies. A 138-kilovolt switch and transfer will be installed parallel to the existing main substation equipment and a new electrical building will be required on surface at the Santoy mine. This option required a minimal changeover site shutdown of one or two days and, on completion, the total capacity available at the Seabee Gold Operation under the PEA will be doubled to 20.0 megavolt amperes.

24.4.2 Tailings Management Facility Expansion

Based on the PEA production schedule, the combined capacity of both the East Lake TMF and Triangle Lake TMF will accommodate tailings deposition until end of year 2020. This means that the tailings management facility expansion will be required earlier than contemplated under the Mineral Reserve life of mine plan. Therefore, a tailings alternative assessment was undertaken in 2016 to determine the best option for a new tailings facility (SRK 2016b). A total of 29 tailings deposition alternatives were assessed within a 5.0-kilometre radius from the Seabee mill. Due to the topography of the area, most alternatives consisted of lake storage that included on land and/or across lake containment structures. Few storage alternatives consisted of on land perimeter containment dikes. The tailings alternative assessment was completed in accordance with Environmental Canada guidelines (Environment Canada 2011), which includes a pre-screening exercise and a multiple accounts analysis taking into account environmental, technical, economic, and socio-economic criteria. Upon comparison of these evaluations, it was evident that an expansion of the Triangle Lake TMF was the preferred option.

As a result of the outcome of the tailings alternative assessment, an expansion of the Triangle Lake TMF is currently in the preliminary engineering phase. This expansion is projected to allow for an additional 10 years of storage capacity at an average production rate of 1,000 tonnes per day. This is equivalent to approximately 2.99 million cubic metres of tailings. The expansion will consist of a raise to the existing North dam, and construction of four new dams, Portage North dam, Portage South dam, Laonil dam and Quarry dam (Figure 28).

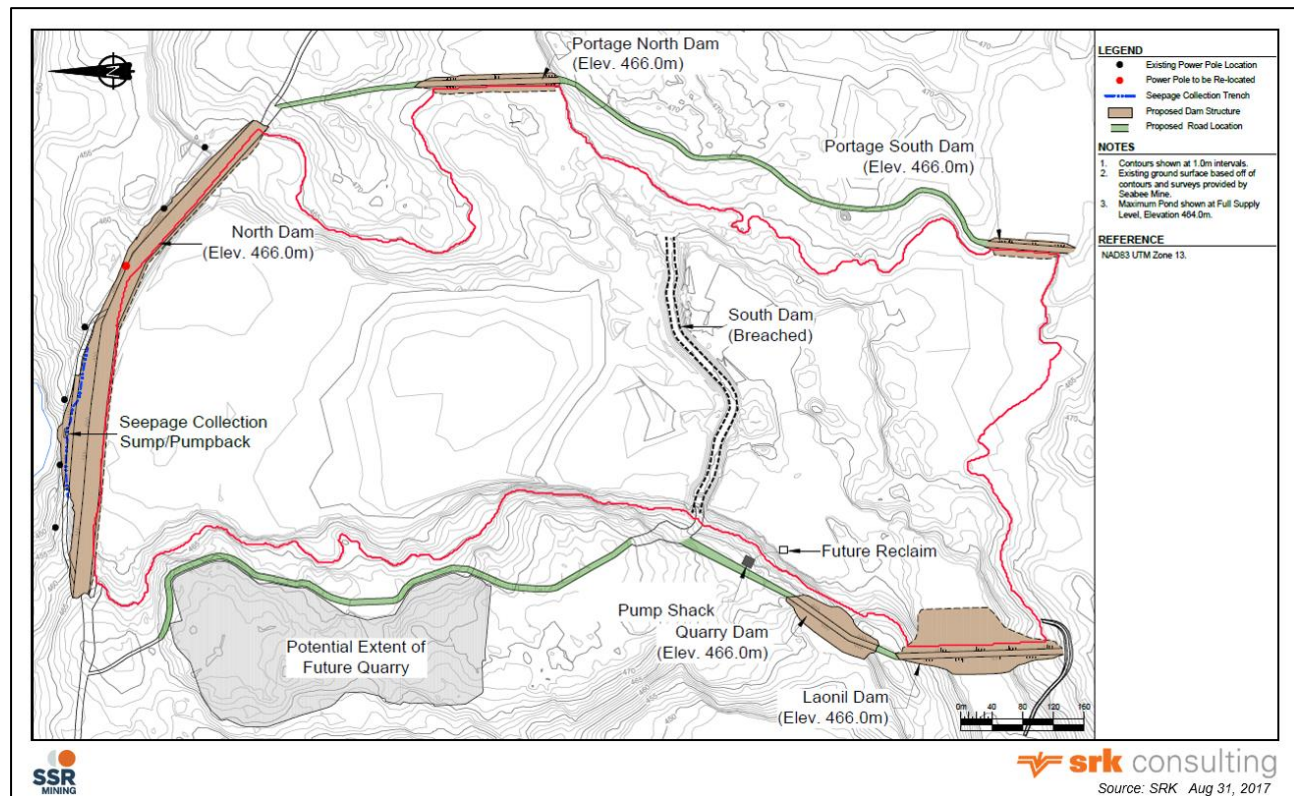


Figure 28: Preliminary Configuration of Triangle Lake TMF Expansion

The ultimate crest elevation of the containment structures will be 466.0 metres, which includes an allowance for freeboard. The North dam raise and new dams will be constructed using mine rockfill (waste rock and/or quarry rock), and the low permeable element within each of the structures will be a geomembrane liner surrounded by appropriate bedding/cover layers. The existing South dam will not be raised and will be properly breached during operations. A typical cross section of the North dam raise is shown in Figure 29, which illustrates the proposed preliminary design. The total bulk material volume required for the expansion is approximately 270,000 cubic metres, where most of this volume will come from quarry situated along the west flank of the Triangle Lake TMF.

For the purpose of evaluating the PEA, the ultimate crest elevation is only required to be 462.0 metres to meet the total capacity requirement of generated tailings.

Construction of the containment structures will be staged, where initial construction (Stage 1) is expected to begin in the summer of 2018 and be completed in the summer of 2020. Tailings deposition in the new facility will begin immediately thereafter.

The new water treatment plant was designed to accommodate the tailings management facility expansion; however, additional reclaim lines and stations with the tailings management facility will be required under the PEA. The tailings line will also have to be extended further by approximately 3.5 kilometres to deposit into the expanded Triangle Lake TMF. To provide access to the containment structures, approximately 1.7 kilometres of new road construction will also be required.

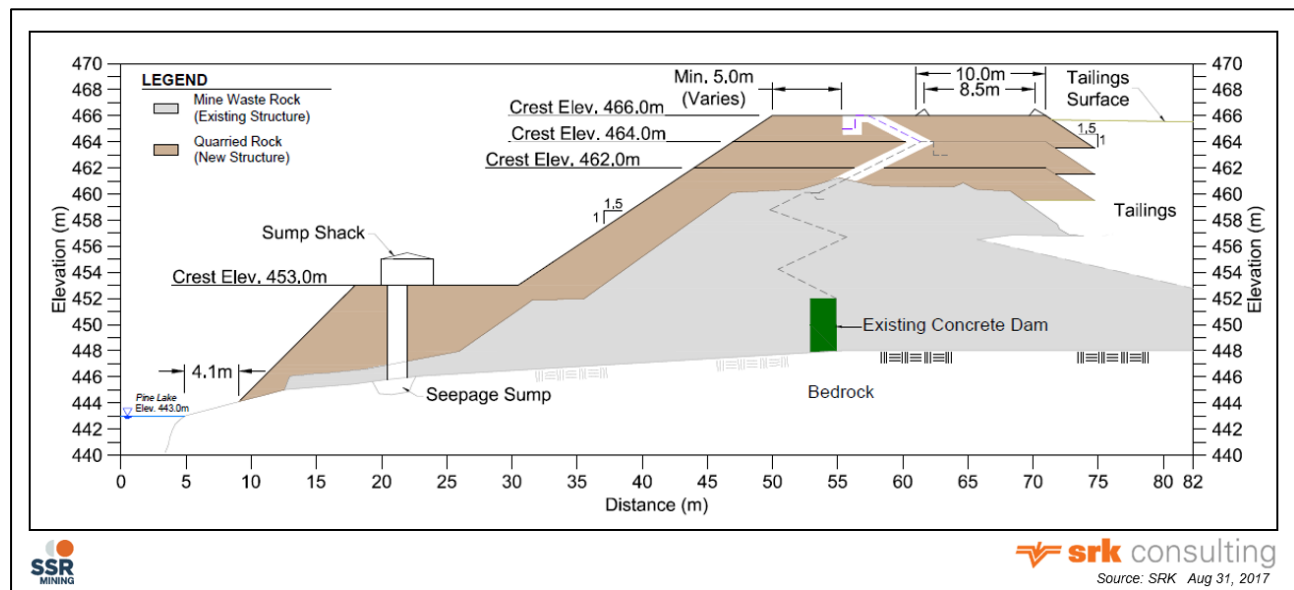


Figure 29: Preliminary Typical Cross Section Through North Dam Raise

24.5 Environmental Studies, Permitting, and Social and Community Impact

The description of the environmental studies, permitting, and social or community impact provided in Section 20 is applicable for the PEA.

The tailings management facility expansion is a construction project included in the PEA that is expected to require an environmental assessment screening by relevant regulatory authorities.

A self-screening of the Triangle Lake TMF expansion concluded no formal federal environmental assessment would be required and provincially, the proposed expansion could be approved by the EAB in accordance with Section 16 of the SEAA 2013, which is in place to address changes to projects that have already undergone a previous environmental assessment. Section 16 of the SEAA 2013 states:

Changes in approved development

16(1) Where a proponent:

(a) has received ministerial approval to proceed; and
(b) intends to make a change in the development that does not conform to the terms or conditions contained in the ministerial approval;
he shall inform the minister of the proposed change before proceeding with it.

(2) Where the minister has received notice of a proposed change, he shall:

(a) give ministerial approval of the proposed change and may impose any terms and conditions that he considers advisable;

Stakeholder engagement plans have been developed to support the proposed expansion of the Triangle Lake TMF. Engagement activities defined in these plans are currently underway, and to date no significant public concerns have been raised with respect to the Seabee Gold Operation or proposed expansion of the Triangle Lake TMF.

For the purposes of the PEA cash flow determination, an additional C\$1.0 million is anticipated in excess of the Mineral Reserve life of mine plan closure costs to reclaim the tailings management facility expansion.

The PEA assumes that all requisite approvals and permits for the expansion will be obtained. While it is believed that such approvals and permits can be obtained on a timely basis and on acceptable terms, there is no certainty that this will be the case.

24.6 Capital and Operating Costs

The methodology for estimating the capital and operating costs for the PEA are the same as described in Section 21.

24.7 Capital Costs

Capital cost estimates in the PEA consider historical construction costs, equipment purchase prices and actual development costs. The total capital required to expand the Seabee Gold Operation to a

1,050 tonnes per day operation over the seven-year operating plan in the PEA is estimated to be \$89.6 million. A summary of estimated capital costs is presented in Table 28.

The majority of the increase in the estimated capital costs in the PEA compared to the Mineral Reserve life of mine plan is due to the Santoy mine electrical distribution construction, the tailings management facility expansion, and additional mobile equipment (new and replacement) purchases to support the longer mine life duration.

Table 28: Summary of PEA Capital Costs

Cost Component (all figures in US\$ MM)	H2 2017	2018	2019	2020	2021	2022	2023	2024	Total
Mining equipment	-	5.3	5.0	2.4	2.9	3.3	-	-	19.0
Tailings	1.6	2.5	3.0	0.2	-	-	-	-	7.2
Surface equipment	0.3	2.1	1.3	1.2	1.2	0.6	-	-	6.6
Underground power	-	2.6	2.2	1.1	-	-	-	-	5.9
Ventilation	0.3	-	-	1.8	-	-	-	-	2.0
Mill	1.6	0.2	0.2	-	-	-	-	-	2.0
Infrastructure	-	2.0	0.8	0.1	-	-	-	-	3.0
Contingency	0.4	1.5	1.2	0.7	0.4	0.4	-	-	4.6
Subtotal sustaining capital	4.2	16.2	13.7	7.4	4.5	4.2	-	-	50.2
Capital development	1.8	5.1	4.4	4.8	3.7	3.2	0.4	-	23.4
Capital exploration	1.9	2.7	2.7	2.5	2.5	2.5	0.7	0.4	15.9
Total capital investment	7.9	24.0	20.9	14.7	10.7	9.9	1.0	0.4	89.6

* Sum of individual values may not match total due to rounding.

24.8 Operating Costs

The operating costs estimated for the PEA are summarized in Table 29. These operating costs were developed based on actual operating experience at the Seabee Gold Operation and are adjusted where appropriate to characteristics specific to the Santoy mine and Seabee mill considering the throughput increase to 1,050 tonnes per day.

The mining expense includes all labour, supplies/consumables, and equipment maintenance to complete mining related processes/activities, less exploration diamond drilling and capital excavations and construction. The milling expense includes all labour and supplies/consumables to complete milling related processes/activities. The administrative expense includes all labour, supplies/consumables, and equipment maintenance to complete administrative, finance, human resources, environmental, safety, supply chain, site services, camp and kitchen, and travel related processes/activities.

Table 29: Summary of PEA Operating Costs

Cost Component	Value US\$/t milled
Mine costs	58
Mill costs	20
Administrative costs	52
Operating Costs	130

Cash costs, which include mining, processing and administrative costs (net of capital development), royalties and refining costs, total \$548 per payable ounce of gold sold over the seven-year operating plan in the PEA. AISC, which include infrastructure capital, capital development, capitalized

exploration and reclamation, total \$682 per payable ounce of gold sold over the seven-year operating plan in the PEA.

Cash costs and AISC per payable ounce of gold sold are non-GAAP financial measures. Please see “Cautionary Note Regarding Forward-Looking Statements” in this Report.

24.9 Economic Analysis

The following section illustrates the financial and economic aspects of the Seabee Gold Operation expansion scenario under the PEA.

The PEA is preliminary in nature, it includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized.

A cash flow was generated using the production profile and cost estimates generated for the PEA production plan and is provided in Table 30.

Table 30: PEA Annual Cash Flow

Item	Unit of Measure	H2 2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	Total
Milled tonnes	'000 tonnes	168	365	383	384	384	384	384	203	-	-	2,654
Grade processed	g/t	7.71	7.85	8.40	10.10	9.11	8.09	7.44	6.48	-	-	8.30
Milled gold	'000 ounces	42	92	104	125	112	100	92	42	-	-	708
Milling recovery	%	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	-	-	96.5
Recovered gold	'000 ounces	41	89	100	120	108	96	88	41	-	-	683
Sales (gross)	US\$ MM	57.7**	115.6	129.8	156.6	140.9	125.1	115.0	52.9	-	-	893.5
Royalty	US\$ MM	(1.7)	(3.4)	(3.8)	(4.6)	(4.1)	(3.7)	(3.4)	(1.6)	-	-	(26.2)
Treatment and refining	US\$ MM	(0.1)	(0.3)	(0.3)	(0.4)	(0.4)	(0.3)	(0.3)	(0.1)	-	-	(2.3)
Mining†	US\$ MM	(11.2)	(22.2)	(22.1)	(21.3)	(23.4)	(21.4)	(21.0)	(11.8)	-	-	(154.3)
Milling	US\$ MM	(3.3)	(6.9)	(7.4)	(7.5)	(7.5)	(7.6)	(7.7)	(4.8)	-	-	(52.8)
Administrative	US\$ MM	(9.5)	(19.6)	(20.3)	(19.4)	(19.3)	(19.0)	(18.6)	(13.2)	-	-	(138.8)
Capitalized development	US\$ MM	(1.8)	(5.1)	(4.4)	(4.8)	(3.7)	(3.2)	(0.4)	-	-	-	(23.4)
Geology and diamond drilling	US\$ MM	(1.7)	(2.7)	(2.7)	(2.5)	(2.5)	(2.5)	(0.7)	(0.4)	-	-	(15.7)
Greenfield exploration	US\$ MM	(0.2)	-	-	-	-	-	-	-	-	-	(0.2)
Sustaining capital cost	US\$ MM	(4.2)	(16.2)	(13.7)	(7.4)	(4.5)	(4.2)	-	-	-	-	(50.2)
Change in working capital	US\$ MM	-	(0.3)	(0.1)	0.3	(0.1)	0.4	0.9	9.1	-	-	10.3
Closure cost	US\$ MM	-	-	-	-	-	-	-	(2.4)	(2.4)	(2.4)	(7.2)
Pre-tax cash flow	US\$ MM	24.0	38.9	54.9	88.9	75.4	63.7	63.9	27.8	(2.4)	(2.4)	432.7
Saskatchewan mineral tax	US\$ MM	-	(1.7)	(5.7)	(9.2)	(7.8)	(6.5)	(6.6)	(2.0)	-	-	(39.6)
Income tax	US\$ MM	-	(2.0)	(7.5)	(15.6)	(6.4)	(8.0)	(7.0)	-	-	-	(46.4)
Post-tax cash flow	US\$ MM	24.0	35.3	41.6	64.1	61.2	49.1	50.3	25.8	(2.4)	(2.4)	346.7

* Sum of individual values may not match total due to rounding.

** Includes sales of approximately 4,250 oz of gold in inventory

† Mining costs are net of capital development and capitalized exploration

Key revenue factors are based on price and foreign exchange rate guidance from SSR Mining and historical refining and treatment charges realized by the Seabee Gold Operation, and include:

- Gold price of US\$1,300 per ounce
- Exchange rate of C\$1.275:US\$1.00 in 2017 and 2018, and C\$1.25:US\$1.00 in 2019 and beyond
- Milling recovery of 96.5 percent
- Refining loss of 0.05 percent

- Treatment and shipping charge of US\$3.40 per ounce
- Royalty of three percent NSR

The operating cost and capital development cost estimates exclude contingency, while capital costs include a 10 percent contingency on construction and equipment items.

The exploration cost is estimated based on a 270,000-metre underground infill diamond drilling program required to upgrade the classification of the Inferred Mineral Resource prior to mining. Unit costs are based on actual exploration costs from 2016.

The change in working capital is calculated based on a sum of changing supplies inventory, accounts receivable, accounts payable, and accrued liabilities.

Mining projects in Saskatchewan are subject to income tax at a combined Federal and Provincial rate which is currently 26.75%, but declining to 26% by July 1, 2019. In addition, the Province of Saskatchewan levies a mining tax of 10% which is deductible against income tax. The Seabee Gold Operation has opening balances of tax attributes, such as non-capital loss carry-forwards, Canadian exploration and development expenses, and financing costs which can be utilized to offset taxable income such that an approximate 20% effective tax rate is realized over the PEA production plan.

24.9.1 Financial Results

The estimated post-tax net present value of the Seabee Gold Operation PEA using a discount rate of 5 percent, generated on July 1, 2017 is US\$292.0 million. The corresponding pre-tax net present value is US\$363.5 million. A summary of key production and financial results is provided in Table 31.

An internal rate of return and payback period is not applicable as the cash flow is positive throughout the PEA production plan.

Table 31: Key PEA Operation and Financial Estimates

Item	Unit of Measure	Value
Tonnes milled	'000 tonnes	2,654
Milled grade	g/t	8.30
Mine plan	years	7
Daily mill production	tonnes/day	1,050
Gold milled	'000 oz	708
Gold recovery	%	96.5
Gold produced	'000 oz	683
Average annual gold production (2018-2023)	'000 oz	100
Gold price	US\$/oz	1,300
Exchange rate (2019-2026)	C\$:US\$	1.25
Cash costs	US\$/payable ounce	548
Capital costs	US\$ MM	89.6
AISC	US\$/payable ounce	682
Cumulative post-tax cash flow	US\$ MM	346.7
NPV5% (pre-tax)	US\$ MM	363.5
NPV5% (post-tax)	US\$ MM	292.0

24.9.2 Sensitivity Analysis

Estimated net present value sensitivities for key operating and economic metrics are provided in Table 32 and Table 33, respectively.

The PEA financial results are most sensitive to revenue parameters, as to be expected with mining projects. The financial results are least sensitive to sustaining capital costs, which is understandable given the Seabee Gold Operation is an established operation with only investment in sustaining capital required.

Table 32: NPV Sensitivity Analysis: Gold Price and Canadian Exchange Rate

Pre-Tax NPV (5%) Sensitivities (US\$ MM)		Gold Price (US\$/oz)				
		1,100	1,200	1,300	1,400	1,500
Exchange rate (C\$:US\$)	1.15	216	272	329	386	442
	1.20	233	289	346	403	459
	1.25	250	307	364	420	477
	1.30	263	319	376	433	489
	1.35	276	333	389	446	502

Note: The Canadian exchange rate for the row labeled "1.25:1" is assumed to be 1.275:1 in 2017 and 2018 and 1.25:1 thereafter.

Table 33: NPV Sensitivity Analysis: Site Costs and Infrastructure Capital

Pre-Tax NPV (5%) Sensitivities (US\$ MM)		Site Costs (% Change)				
		-20%	-10%	0%	10%	20%
Infrastructure Capital (% Change)	+20%	420	387	354	322	289
	+10%	424	392	359	326	294
	0%	429	396	364	331	298
	-10%	433	401	368	335	303
	-20%	438	405	373	340	307

Note: Site costs include mining costs, processing costs, administrative costs, capital development, and capitalized exploration.

24.10 Other Relevant Data and Information

There is no other relevant data available pertaining to the results of the PEA.

24.11 Interpretation and Conclusions

SRK is of the opinion that the geological and engineering work completed to support the PEA includes sufficient levels of detail and effort and indicates positive economics for the Seabee Gold Operation life of mine plan. Thus, advancement in further exploration and engineering work is warranted.

The results from the PEA indicate that the Mineral Resources may support a 1,050-tonne-per-day operation until 2024. The Mineral Resources within the PEA production plan include 2.654 million tonnes at an average grade of 8.30 g/t gold. This corresponds to a delivery of 708,000 ounces of gold to the mill.

The capital cost to support the PEA production plan is estimated at US\$89.6 million with an operating cost estimated at US\$130 per tonne milled (equating to a cash cost of US\$548 per payable ounce of gold and an AISC of US\$682 per payable ounce of gold).

At a gold price of US\$1,300 per ounce, a variable exchange rate between C\$1.25 to C\$1.275:US\$1.00, and a discount rate of 5 percent, the post-tax net present value will be US\$292.0 million.

The PEA is preliminary in nature, it includes inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized.

24.12 Recommendations

SRK is of the opinion that with the understanding of the geological setting and character of the gold mineralization delineated to date at the Seabee Gold Operation and the positive financial analysis based on the PEA production plan are of sufficient merit to justify continued exploration and engineering study.

A surface and underground infill diamond drilling program of 300,000 metres is proposed by SSR Mining between 2018 and 2022. This program is focused on upgrading the Inferred Mineral Resource prior to mining and other near mine targets within the infrastructure corridor between the Seabee mine and Santoy mine. The cost of the program is estimated at C\$16.2 million. The portion of drilling that would upgrade the Inferred Mineral Resource at the Santoy mine, 210,000 metres of drilling, has been included in the PEA economic analysis. This is an ongoing program proposed during the PEA production plan with the drilling occurring over a five-year duration as strategically located diamond drill chambers are excavated.

As the confidence of the Mineral Resource advances via the proposed diamond drilling program, SRK recommends that the SSR Mining technical department at the Seabee Gold Operation continue to refine the PEA production plan to optimize its technical and economic basis. As is current practice, this should be completed as part of the SSR Mining annual life of mine plan updates. The cost of this engineering study is minimal as it is included within SSR Mining's current practice of its annual Mineral Resources and, Mineral Reserves estimates, and life of mine plan update.

Over the course of auditing the PEA, several opportunities were identified by SRK that are recommended to be investigated to potentially improve the economics of the Seabee Gold Operation contemplated under the PEA, including but not limited to the following:

- SRK notes that the design and cost estimate for the expansion of the ventilation system and increase in electrical distribution capacity at the Santoy mine are based on a production rate of 1,200 tonnes per day. A follow-up design to the correct sized 1,050 tonnes per day production rate may provide capital cost savings.
- Mineral Resources within the PEA production plan were outlined manually. Using automated stope shape optimizing computer software may provide an opportunity to improve the planned gold grade.

The cost of completing the above at a prefeasibility study level is approximately US\$100,000.

Results from the proposed and recommended geology and engineering work should be assessed at least annually to provide SSR Mining with up-to-date information to guide strategic, long term decisions for the Seabee Gold Operation.

SSR Mining's operating and technical departments on site at the Seabee Gold Operation and at the Saskatoon and Vancouver offices have identified other opportunities to investigate as part of their normal continuous improvement operating practice:

- The Seabee mill has the potential to achieve operating throughput of up to 1,200 tonnes per day based on upgraded mill facilities and operating experience at similar mills. This would further increase production from that contemplated under the PEA and potentially improve operating costs due to economies of scale and extend mine life.
- The implementation of Operational Excellence projects identified based on SSR Mining's operating experience may present incremental improvements to production and operating costs. Such projects may include the following:
 - Drilling and blasting studies to improve fragmentation, reduce over-blast and reduce dilution, leading to lower costs and better grade control;
 - Equipment availability and utilization improvements to increase equipment efficiency and lower costs;
 - Installation of a ventilation-on-demand system to lower ventilation costs;
 - Improvement and modification of current ground support systems, increasing efficiency and reducing costs;
 - Evaluation of digital tracking of underground operations and equipment to improve efficiencies;
 - Further capacity and efficiency improvements in the process plant to reduce costs and increase production; and
 - Evaluation of a runway extension to allow larger direct flights to reduce costs and improve efficiency of shift changes.

25 Interpretation and Conclusions

In the opinion of SSR Mining and SRK, the Mineral Resource and Mineral Reserve estimates, and PEA summarized herein have received appropriate geological and engineering consideration to be included in this Report in accordance with NI 43-101. Thus, a Mineral Resource and Mineral Reserve can be declared and the PEA can be used as a guide to consider an expansion case for the Seabee Gold Operation.

SRK is not aware of any significant risks and uncertainties that could be expected to affect the reliability or confidence in the information discussed herein.

25.1 Mineral Resource

The Mineral Resource models for both the Seabee and Santoy deposits were prepared by SSR Mining considering core drilling and chip sampling by SSR Mining and previous operators during the period of 1987 to 2016. The database used to estimate the Mineral Resources and the Mineral Resource models were audited by SRK.

SRK is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the boundaries for gold mineralization and that the assay data are sufficiently reliable to support Mineral Resource estimation. Block modelling methodologies were used for Mineral Resource evaluation for the Santoy mine and most of the Seabee mine. Polygonal Mineral Resource evaluation techniques were used in areas of historical mining at the Seabee mine and in the Porky deposit area. SRK reviewed each step of the Mineral Resource estimation process for both the Seabee and Santoy deposits and is of the opinion that the procedures applied broadly conform to industry best practice, but have also identified opportunities to enhance the local accuracy of the grade estimates.

Mineral Resources were estimated in conformity with *CIM Mineral Resource and Mineral Reserves Estimation Best Practices Guidelines* and are classified according to the *CIM Standard Definition for Mineral Resources and Mineral Reserves*.

The “reasonable prospects for eventual economic extraction” requirement contained in the CIM standards generally implies that the quantity and grade estimates meet certain economic thresholds and that the Mineral Resource is reported at an appropriate cut-off grade, taking into account extraction scenarios and processing recoveries. The Mineral Resource is amenable to underground extraction as presented at a cut-off grade of 3.26 g/t gold for the Santoy mine deposits and 4.40 g/t gold for the Seabee mine deposits.

The Mineral Resource Statement for the Seabee Gold Operation, inclusive of Mineral Reserves, is presented in Table 34. The Mineral Resources may be affected by further infill and exploration drilling that may result in increases or decreases in subsequent resource estimates. The Mineral Resource may also be affected by subsequent assessments of mining, environmental, processing, permitting, taxation, socio-economic, and other factors. The effective date of the Mineral Resources Statement is December 31, 2016.

Table 34: Mineral Resource Statement, Seabee Gold Operation, Saskatchewan, SSR Mining Inc., December 31, 2016

Classification/Area	Quantity ('000 t)	Grade Gold (g/t)	Contained Gold ('000 oz)
Measured			
Seabee	175	6.76	38
Santoy Gap	598	7.90	152
Santoy 8	33	9.29	10
Porky West	—	—	—
Total Measured	807	7.71	200
Indicated			
Seabee	111	8.39	30
Santoy Gap	688	8.40	186
Santoy 8	367	9.12	108
Porky West	101	3.57	12
Total Indicated	1,267	8.22	335
Total M&I	2,074	8.02	535
Inferred			
Seabee	356	8.62	99
Santoy Gap	510	9.23	151
Santoy 8	1,454	7.14	334
Porky West	175	5.48	31
Total Inferred	2,495	7.66	615

Notes: Mineral Resources are not Mineral Reserves and have not demonstrated economic viability. Mineral Resources are reported inclusive of Mineral Reserves. All figures are rounded to reflect the relative accuracy of the estimates. Mineral Resources are reported within classification domains inclusive of in-situ dilution at a diluted cut-off grade of 4.40 g/t gold at the Seabee mine and 3.26 g/t gold at the Santoy mine assuming an underground extraction scenario, a gold price of US\$1,400/oz, C\$:US\$ exchange rate of 1.25; and metallurgical recovery of 96.5%. Block modelling techniques were used for Mineral Resources estimates for the Santoy mine and the majority of the Seabee mine. Polygonal techniques were used in areas of historical mining at the Seabee mine at Porky West.

25.2 Mineral Reserve

Based on current practice, actual performance and cost data, and current technical and economic conditions, the Seabee Gold Operation will sustain production until early 2021 with a production rate of 920 tonnes per day. Mining will continue using longhole mining methods with access provided underground via independent surface portals and ramps at each the Santoy mine and Seabee mine. The Mineral Reserves identified at a cut-off grade of 3.65 g/t gold for the Santoy mine deposits and 4.92 g/t gold for the Seabee mine deposits are presented in Table 35. The effective date of the Mineral Reserves Statement is December 31, 2016.

The Mineral Reserve life of mine plan requires capital costs of US\$34.7 million and results in an operating cost of US\$148 per tonne milled (equating to a cash cost of US\$624 per payable ounce of gold sold and an AISC of US\$725 per payable ounce of gold). SRK, through auditing the life of mine plan supporting information, confirms that the Mineral Reserve declared herein provides a positive cash flow given the technical and economic conditions at the time of writing this Report.

Cash costs and AISC per payable ounce of gold sold are non-GAAP financial measures. Please see “Cautionary Note Regarding Forward-Looking Statements” in this Report.

**Table 35: Mineral Reserve Statement, Seabee Gold Operation, Saskatchewan, Canada
SRK Consulting (Canada) Inc., December 31, 2016**

Category	Quantity (‘000 t)	Gold Grade (g/t)	Contained Gold (‘000 oz)
Proven			
Santoy Mine	380	7.41	90
Seabee Mine	82	6.98	18
Broken (Underground and Stockpile)	56	4.04	7
Total Proven	518	6.97	116
Probable			
Santoy Mine	805	9.03	234
Seabee Mine	48	7.37	11
Total Probable	854	8.93	245
Total Proven and Probable	1,371	8.19	361

Notes: Mineral Reserves are included in Mineral Resources. All figures have been rounded to reflect the relative accuracy of the estimate. Mineral Reserves are based on a cut-off value of 4.92 g/t gold for the Seabee mine and 3.65 g/t gold for the Santoy mine assuming: a gold price of US\$1,250/oz; a C\$:US\$ exchange rate of 1.25; milling recoveries of 96.5%; royalty of 3.0%; and operating cost of C\$231/t at the Seabee mine and C\$172/t at Santoy mine. Mineral Reserves are stated at a mill feed reference point and include for diluting materials and mining losses.

25.3 PEA Summary

The Seabee Gold Operation PEA considers an expansion scenario based on SSR Mining’s operating experience and investment in exploration to increase Mineral Resources at the Seabee Gold Operation since its acquisition in May 2016. The PEA production plan includes 2.654 million tonnes at an average grade of 8.30 g/t gold. At a peak production rate of 1,050 tonnes per day, the life of mine would be extended to 2024, providing 708,000 contained ounces of gold in mill feed.

Cost estimates included in the PEA are based on actual cost data from 2016, historical construction and equipment purchase prices, and results from study work completed by SRK and third-party consulting firms, and include capital costs totalling US\$89.6 million and operating costs of US\$130 per tonne milled (equating to a cash cost of US\$548 per payable ounce of gold and an AISC of US\$682 per payable ounce of gold).

The PEA results in post-tax net present value of US\$292.0 million based on a gold price of US\$1,300 per ounce, a variable exchange rate between C\$1.25 to C\$1.275:US\$1.00, and a discount rate of 5 percent.

The PEA is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have the economic considerations applied to them that would enable them to be categorized as Mineral Reserves, and there is no certainty that the PEA will be realized.

26 Recommendations

Further opportunity exists for potential Mineral Resources discovery and conversion of Mineral Resources to Mineral Reserves at the current Seabee Gold Operation, including:

- Exploration drilling during 2017 has been successful in expanding known gold mineralization at Santoy 8 and Santoy Gap as well as identifying new gold mineralization in the area of Gap Hangingwall.
- Potential for new mineralization discoveries in close proximity to existing infrastructure, including potential at the Carr target, located four kilometres to the north of Santoy Gap, and on the extension of the Santoy shear on the Fisher property.

SSR Mining has proposed a five-year exploration program at the Seabee Gold Operation that includes 80,000 metres of surface diamond drilling at an estimated cost of US\$11 million. This program intends to test various greenfield targets such as the Carr trend and brownfield targets such as those near Munro Lake that also exhibit stratigraphy, alteration, and mineralization similar to the Santoy deposits.

In addition, SSR Mining has also proposed an infill surface and underground drilling program of almost 300,000 metres at an estimated cost of C\$16.2 million between 2018 and 2022. The surface drilling will focus on targets between the Santoy mine and Seabee mine that are in proximity to the haulage road and have either limited, but notable historic drilling or surface showings with strong soil sample anomalies; the concept being that production from these targets, if proven, could be achieved within a three to five-year timeline. The underground drilling is intended to improve the confidence in the Inferred Mineral Resource included in the PEA production plan. Based on the results of the audit of the Mineral Resource and Mineral Reserve estimates and PEA, SRK recommends executing the exploration and infill diamond drilling programs proposed by SSR Mining to potentially expand and improve the level of confidence in the Mineral Resource. Structural geology investigations on the property should be ongoing as new drilling data is generated and these should be integrated into regular Mineral Resource model updates. SRK also recommends that SSR Mining implement the suggestions discussed in this Report to further improve Mineral Resource estimation methodologies and to enhance the accuracy of local gold grade estimation.

As the geological understanding of the Seabee Gold Operation improves, SRK recommends refining the PEA at least annually to determine modifications to the production plan and provide guidance for further exploration and mining focus. This is current practice for the technical department at the Seabee Gold Operation for the current Mineral Reserve life of mine plan and is covered within normal operating costs.

Regional exploration activities should continue particularly evaluating the northern extension of the Santoy shear zone near the Carr target and the southern extension of the Santoy shear zone toward the adjacent Fisher property, which SRK considers to have sufficient merit to justify additional exploration expenditures.

SSR Mining's operating and technical departments on site at the Seabee Gold Operation and at the Saskatoon and Vancouver offices have identified other opportunities to investigate as part of their normal continuous improvement operating practice:

- The Seabee mill has the potential to achieve operating throughput of up to 1,200 tonnes per day based on upgraded mill facilities and operating experience at similar mills. This would further increase production from that contemplated under the PEA and potentially improve operating costs due to economies of scale and extend mine life.
- The implementation of Operational Excellence projects identified based on SSR Mining's operating experience may present incremental improvements to production and operating costs. Such projects may include the following:
 - Drilling and blasting studies to improve fragmentation, reduce over-blast and reduce dilution, leading to lower costs and better grade control;
 - Equipment availability and utilization improvements to increase equipment efficiency and lower costs;
 - Installation of a ventilation-on-demand system to lower ventilation costs;
 - Improvement and modification of current ground support systems, increasing efficiency and reducing costs;
 - Evaluation of digital tracking of underground operations and equipment to improve efficiencies;
 - Further capacity and efficiency improvements in the process plant to reduce costs and increase production; and
 - Evaluation of a runway extension to allow larger direct flights to reduce costs and improve efficiency of shift changes.

SRK is unaware of any other significant factors and risks that may affect access, title, or the right or ability to perform the exploration work recommended for the Seabee Gold Operation.

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APPENDIX A

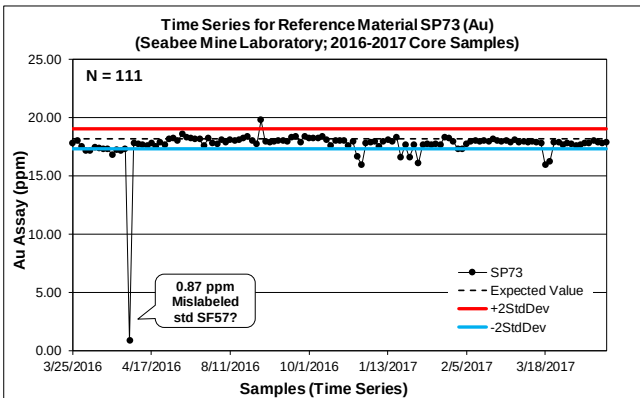
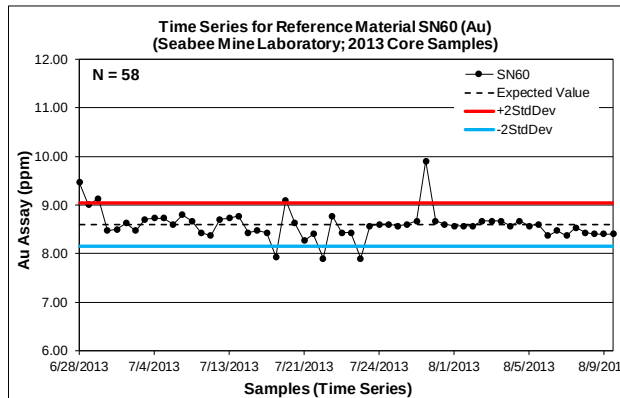
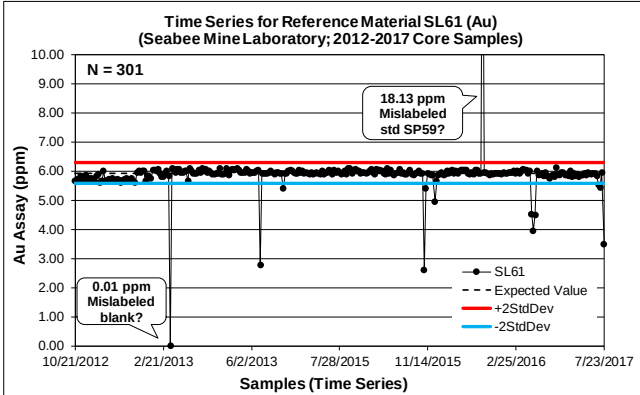
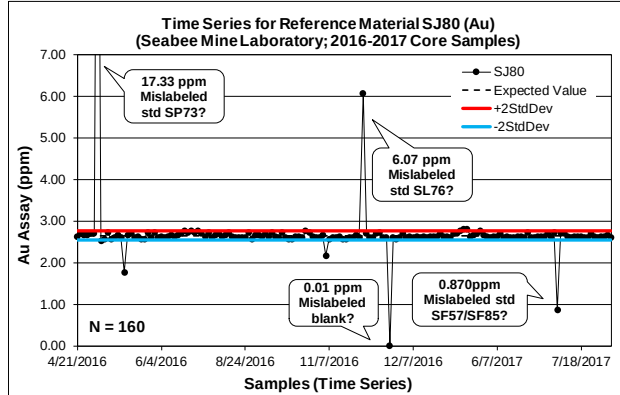
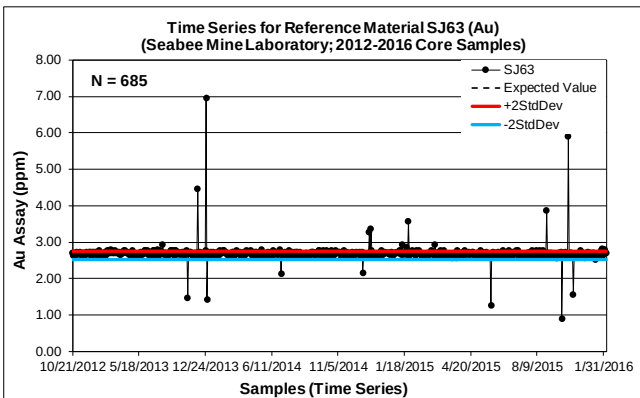
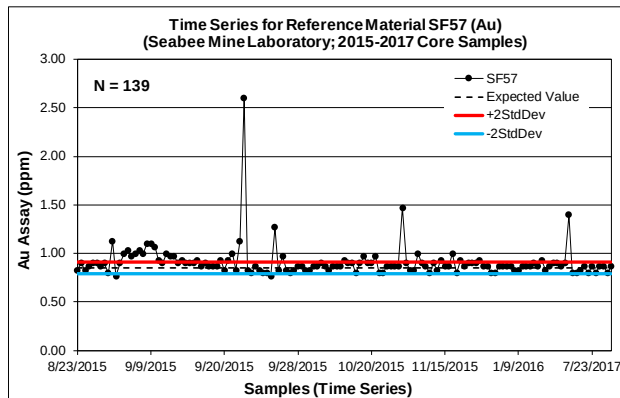
QA/QC Information

Time series plots for reference materials (standards) SF57, SJ63, SJ80, SL61, SN60 and SP73 assayed by the on-site Seabee mine laboratory for mine geology samples.



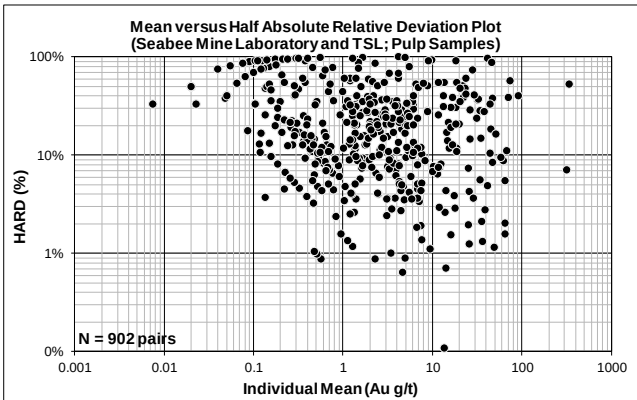
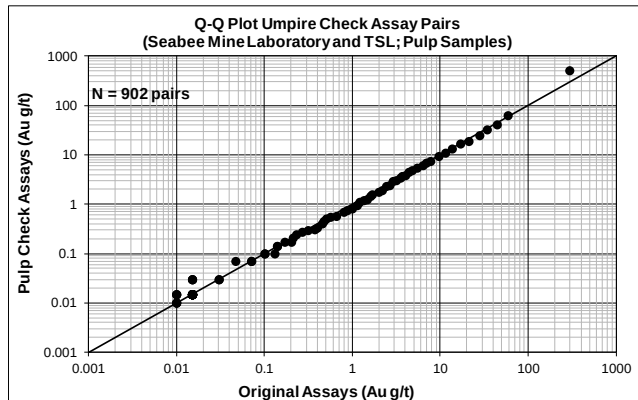
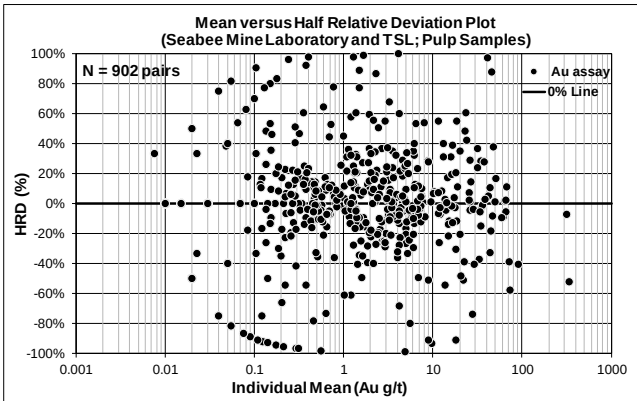
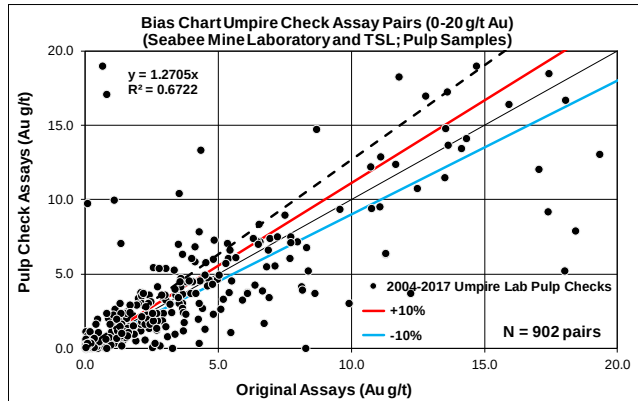
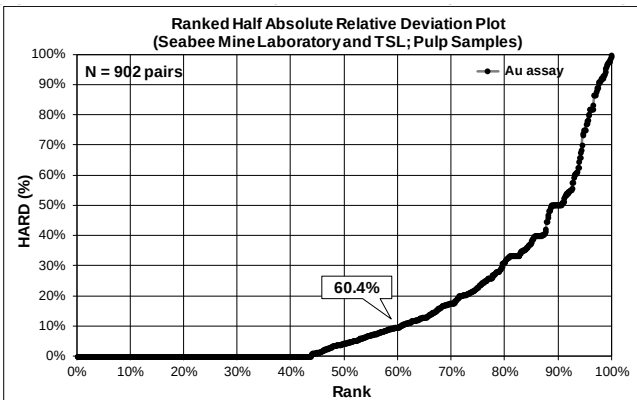
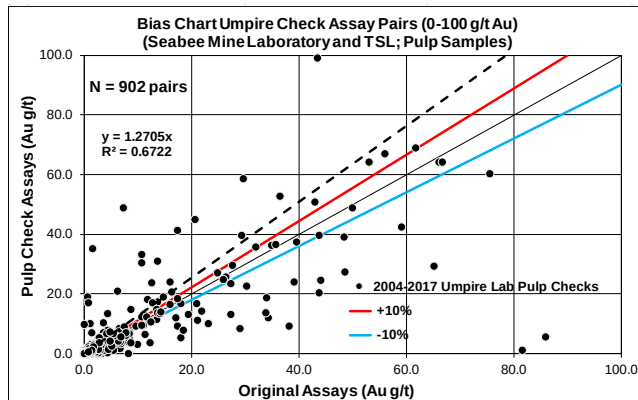
Project Seabee Gold Operation
Data Series 2012-2017 Standards
Data Type Core Samples
Commodity Au
Laboratory Seabee Mine Laboratory
Analytical Method Fire assay - gravimetric finish
Detection Limit 0.01 g/t Au

Statistics	SF57	SJ63	SJ80	SL61	SN60	SP73
Sample Count	139	685	160	301	58	111
Expected Value	0.848	2.632	2.656	5.931	8.595	18.17
Standard Deviation	0.030	0.055	0.057	0.177	0.223	0.420
Data Mean	0.910	2.693	2.723	5.892	8.591	17.65
Outside 2StdDev	26%	12%	6%	4%	12%	14%
Below 2StdDev	2	7	5	12	3	15
Above 2StdDev	34	78	4	1	4	1



Bias charts and precision plots for 2004 to 2017 umpire check assays conducted between the on-site Seabee mine laboratory and TSL for mine geology samples.

		Statistics	Original	Pulp Check
Project	Seabee Gold Operation	Sample Count	902	902
Data Series	2004-2017 Umpire Lab Pulp Checks	Minimum Value	0.010	0.005
Data Type	Pulp Samples	Maximum Value	292.20	517.60
Commodity	Au in g/t	Mean	3.936	4.399
Analytical Method	Fire assay - gravimetric finish	Median	0.100	0.100
Detection Limit	0.01 g/t Au	Standard Error	0.493	0.769
Original Dataset	Original Assays	Standard Deviation	14.793	23.105
Paired Dataset	Pulp Check Assays	Correlation Coefficient	0.8203	
		Pairs ≤ 10% HARD	60.4%	

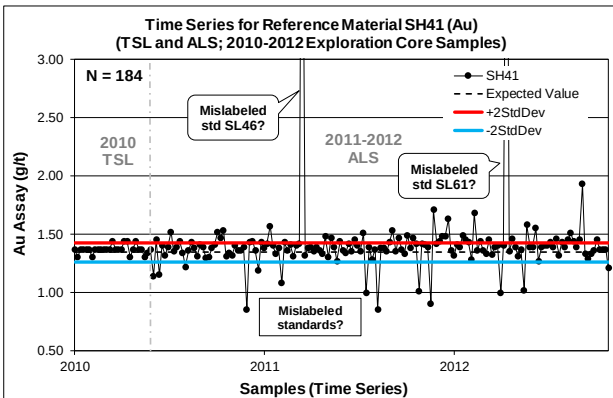
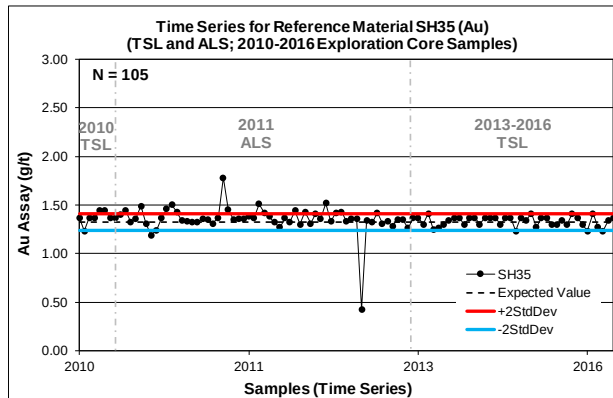
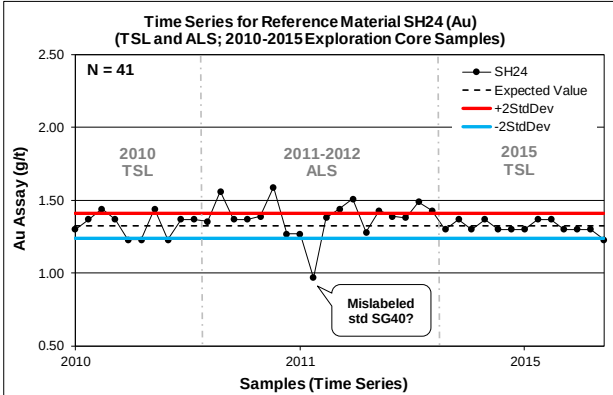
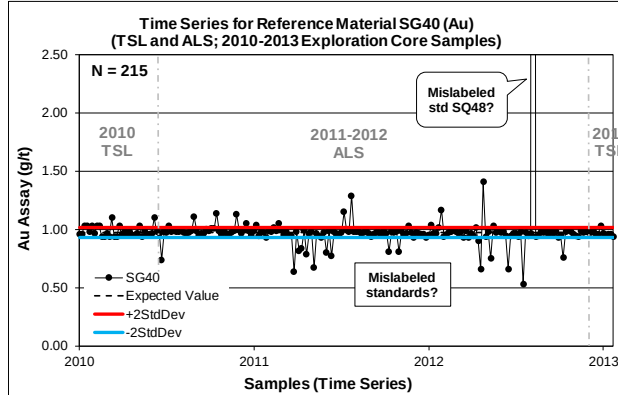
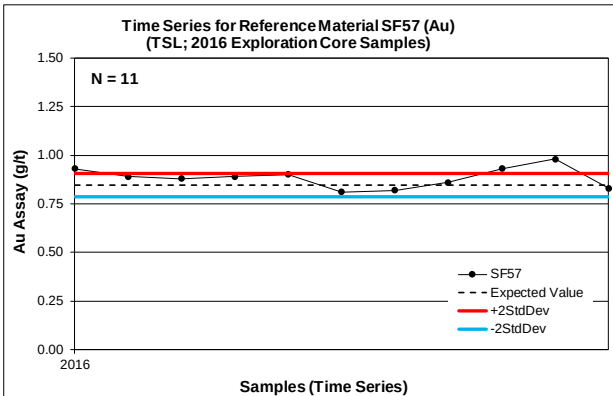
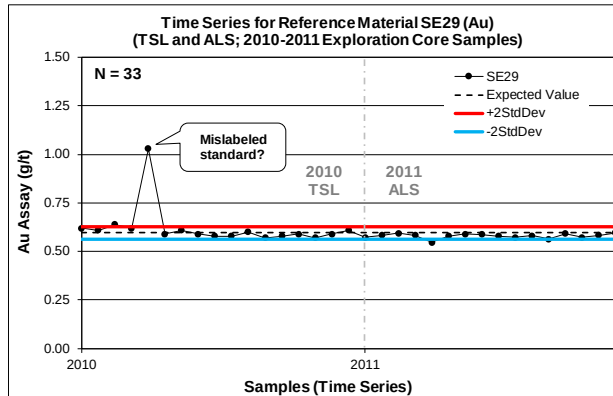


Time series plots for reference materials (standards) SE29, SF57, SG40, SH24, SH35 and SH41 assayed by TSL and ALS for exploration samples.



Project Seabee Gold Operation
Data Series 2010-2016 Standards
Data Type Exploration Core Samples
Commodity Au
Laboratory TSL and ALS Vancouver
Analytical Method FA-GRAV
Detection Limit 0.03 g/t

Statistics	SE29	SF57	SG40	SH24	SH35	SH41
Sample Count	33	11	215	41	105	184
Expected Value	0.597	0.848	0.976	1.326	1.323	1.344
Standard Deviation	0.016	0.030	0.022	0.043	0.044	0.041
Data Mean	0.602	0.884	1.105	1.350	1.348	1.424
Outside 2StdDev	9%	27%	20%	34%	22%	35%
Below 2StdDev	1	0	18	5	6	13
Above 2StdDev	2	3	25	9	17	51

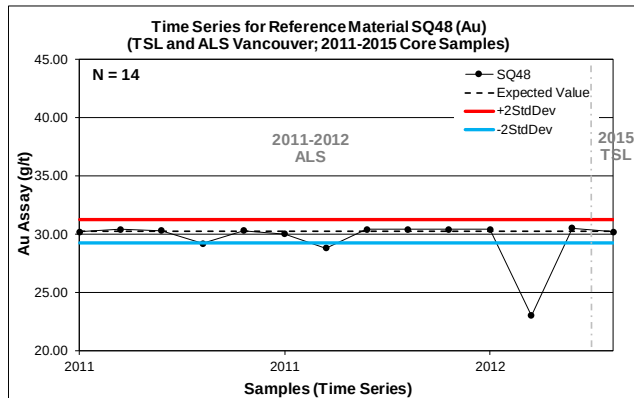
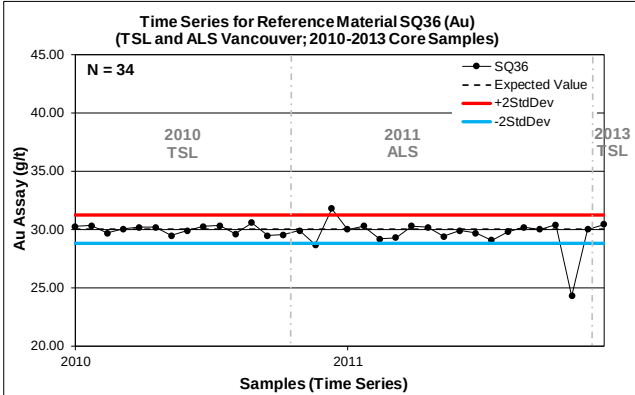
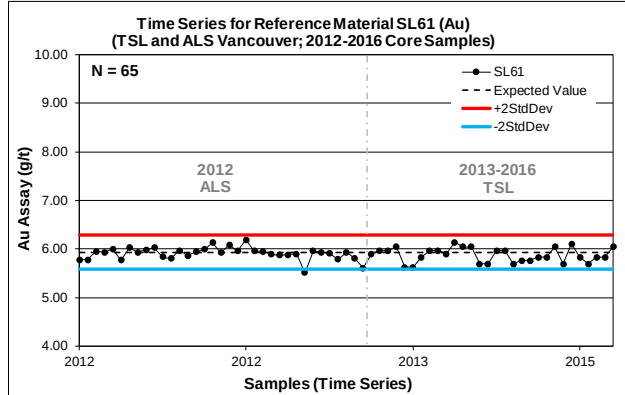
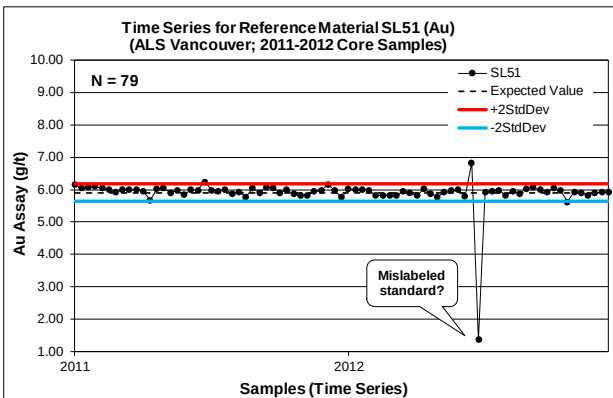
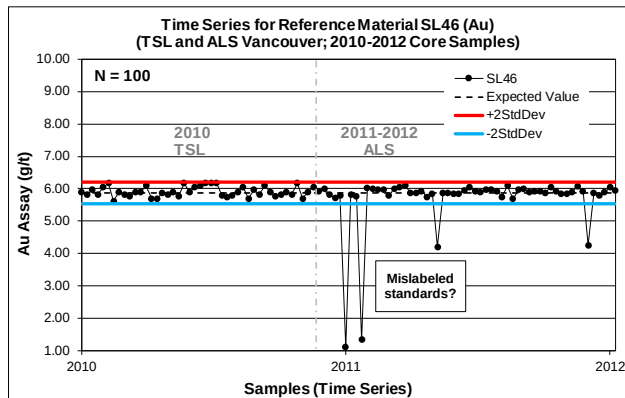


Time series plots for reference materials (standards) SL46, SL51, SL61, SQ36 and SQ48 assayed by TSL and ALS for exploration samples.



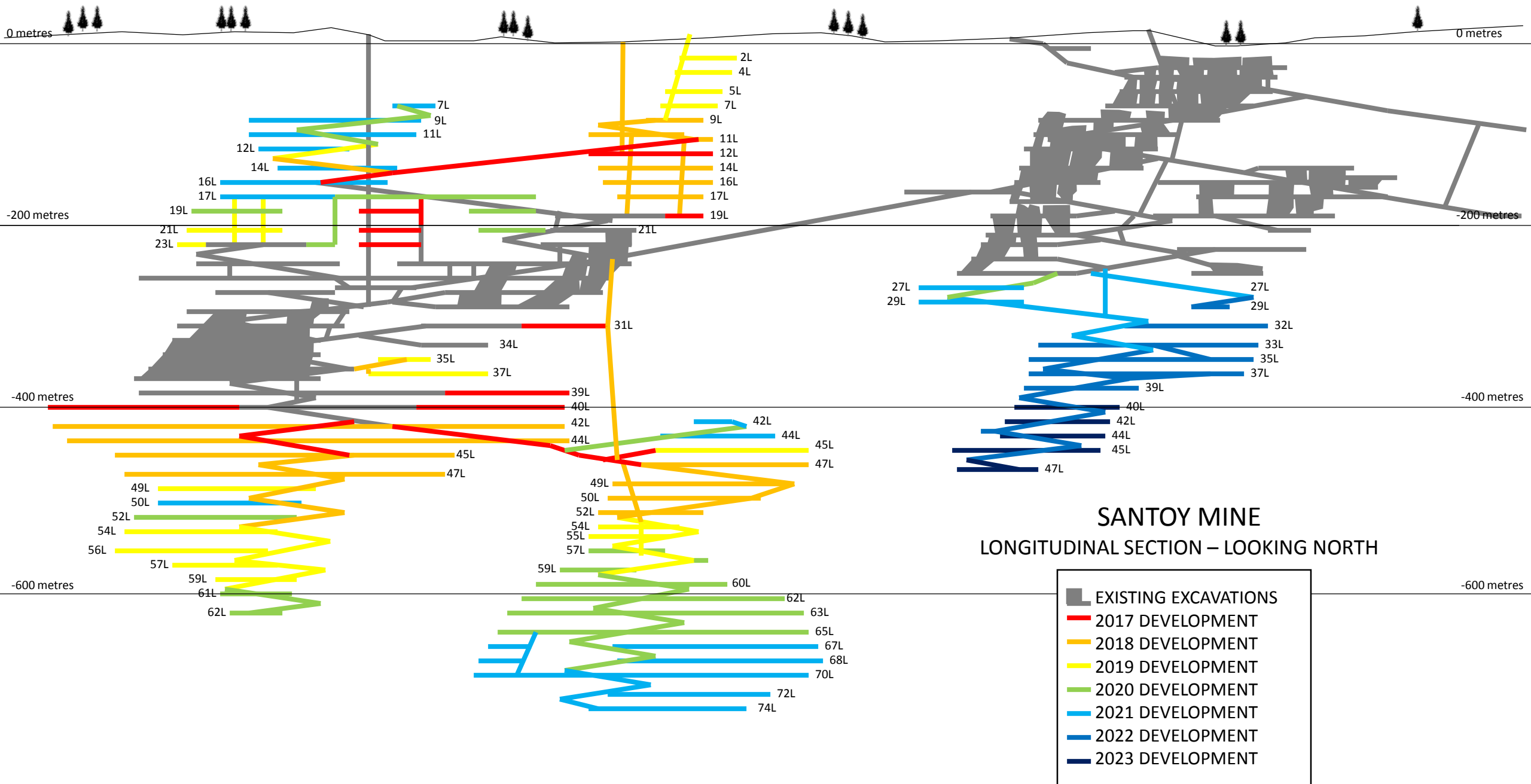
Project Seabee Gold Operation
Data Series 2010-2016 Standards
Data Type Core Samples
Commodity Au
Laboratory TSL and ALS Vancouver
Analytical Method FA-GRAV
Detection Limit 0.03 g/t

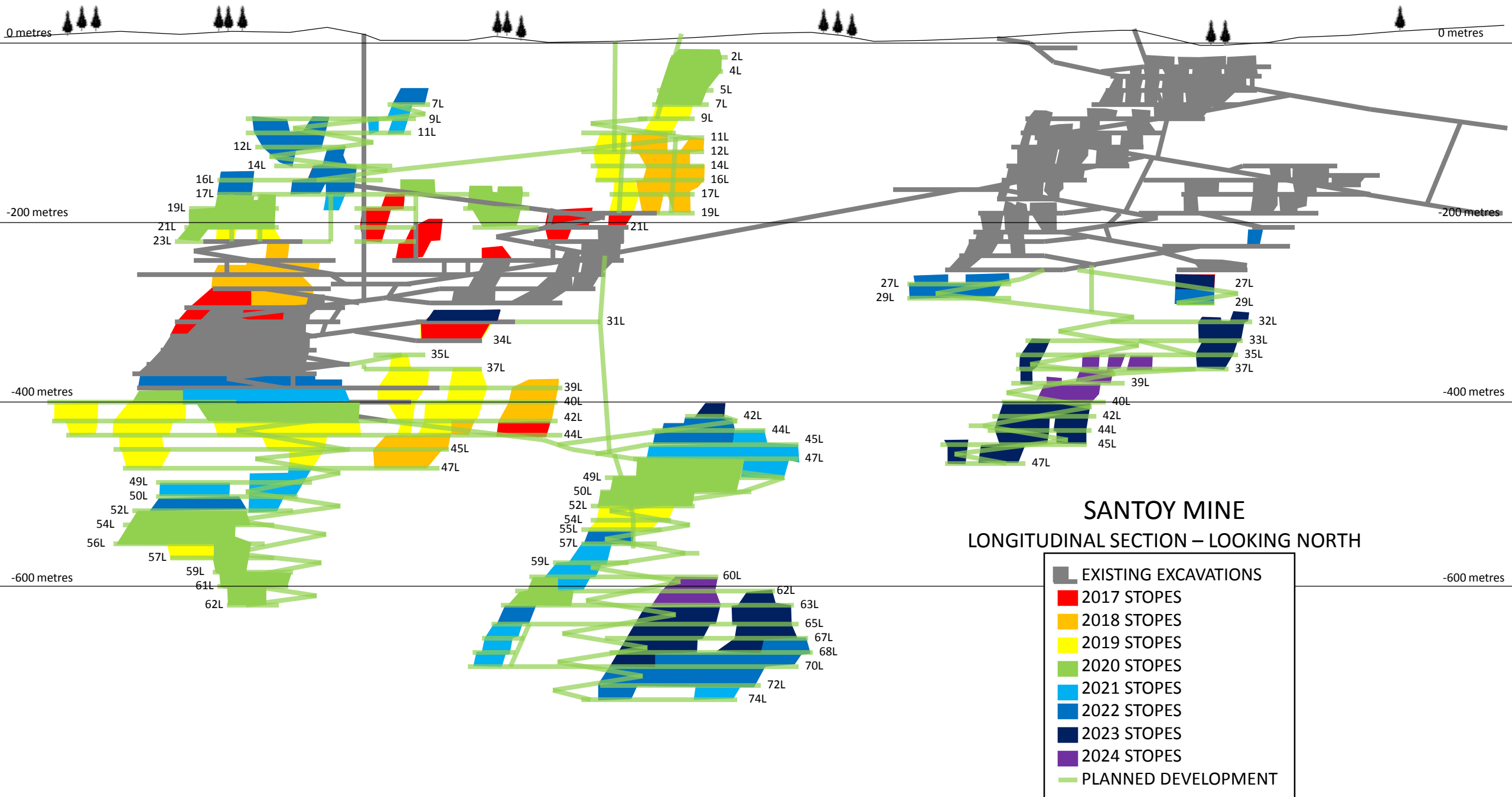
Statistics	SL46	SL51	SL61	SQ36	SQ48
Sample Count	100	79	65	34	14
Expected Value	5.867	5.909	5.931	30.04	30.25
Standard Deviation	0.170	0.136	0.177	0.600	0.510
Data Mean	5.783	5.897	5.892	29.79	29.61
Outside 2StdDev	4%	5%	2%	9%	21%
Below 2StdDev	4	2	1	2	3
Above 2StdDev	0	2	0	1	0



APPENDIX B

Mining Schedule Longitudinal Sections





APPENDIX C

Certificates of Qualified Persons

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: **NI 43-101 Technical Report for the Seabee Gold Operation, Saskatchewan, Canada, October 20, 2017, with an effective date of December 31, 2016.**

I, Michael Selby, do hereby certify that:

- 1) I am a Principal Consultant (Mining) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 101, 1984 Regent Street South, Sudbury, Ontario, Canada;
- 2) I am a graduate of Queen's University in 2001. I obtained a Bachelor of Science in Mining Engineering. I have practiced my profession continuously since 2001 in operating, engineering, and consultancy roles. I have extensive experience in conducting mining technical studies, including: trade-off studies on cut-off value, mining method, primary access, ore and waste handling. My experience also includes the design and execution of mining stopes, lateral and vertical development, underground infrastructure and construction. I have worked extensively with developing production schedules, labour and mobile equipment profiles, capital, sustaining and operating cost estimates, and narrow vein long-hole mining methods;
- 3) I am a Professional Engineer registered with the Association of Professional Engineers & Geoscientists of Saskatchewan (APEGS#30781) and the Association of Professional Engineers of Ontario (PEO#100083134).
- 4) I have personally inspected the subject project on May 29 to May 31, 2017.
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for sections 1, 2, 3, 13, 15, 16, 17, 18, 19, 21, 22, 24, 25, 26 and 27 and accept professional responsibility for those sections of this technical report;
- 8) I have provided mining engineering consultancy services to the subject property in 2013;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by SSR Mining Inc. to prepare a technical audit of the Seabee Gold Operation. In conducting our audit, a gap analysis of project technical data was completed using Canadian Securities Administrators National Instrument 43-101 guidelines. The report is based on a site visit, a review of project files and discussions with SSR Mining Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Seabee Gold Operation or securities of SSR Mining Inc.; and
- 12) As of the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Sudbury, Ontario
October 20, 2017

"Original signed and sealed"
Michael Selby, PEng (APEGS#30781)
Principal Consultant (Mining)

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: **NI 43-101 Technical Report for the Seabee Gold Operation, Saskatchewan, Canada, October 20, 2017, with an effective date of December 31, 2016.**

I, Dominic Chartier, do hereby certify that:

- 1) I am a Senior Consultant (Geology) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 1500, 155 Yonge Street, Toronto, Ontario, Canada;
- 2) I am a graduate of McGill University in Montreal, Quebec, with a B.Sc. in Earth and Planetary Sciences in 2002. I have practiced my profession continuously since 2002. I have created geological and ore deposit 3D models, analyzed the geostatistics and variography of ore deposits, completed National Instrument 43-101 compliant mineral resource estimations, evaluated the geotechnical and structural properties of ore deposits, reviewed analytical quality control sample results, and co-authored or contributed to numerous National Instrument 43-101 technical reports focused on gold, base metal and precious metal projects in Canada, West Africa, and South America;
- 3) I am a Professional Geologist, registered with the Association of Professional Engineers & Geoscientists of Saskatchewan (APEGGS#39656), the Ordre des Géologues du Québec (OGQ #874) and the Association of Professional Geoscientists of Ontario (APGO #2775);
- 4) I have personally inspected the subject project on May 29 to May 31, 2017;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for sections 4.1, 4.2, 5, 6, 7, 8, 9, 10, 11, 12, 14.1, 14.7, and 23 and accept professional responsibility for those sections of this technical report;
- 8) I have had no prior involvement with the subject property;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by SSR Mining Inc. to prepare a technical audit of the Seabee Gold Operation. In conducting our audit, a gap analysis of project technical data was completed using Canadian Securities Administrators National Instrument 43-101 guidelines. The report is based on a site visit, a review of project files and discussions with SSR Mining Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Seabee Gold Operation or securities of SSR Mining Inc.; and
- 12) As of the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Toronto, Ontario
October 20, 2017

["Original signed and sealed"]
Dominic Chartier, PGeo (APEGGS#39656)
Senior Consultant (Geology)

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: **NI 43-101 Technical Report for the Seabee Gold Operation, Saskatchewan, Canada, October 20, 2017, with an effective date of December 31, 2016.**

I, Mark Liskowich, do hereby certify that:

- 1) I am a Principal Consultant (Environmental Management) with the firm of SRK Consulting (Canada) Inc. (SRK) with an office at Suite 205, 2100 Airport Drive, Saskatoon, Saskatchewan, Canada;
- 2) I am a graduate of the University of Regina, in 1989, I obtained a Bachelor of Science. I have practiced my profession continuously since 1989. My expertise is in the environmental, permitting, and social management of mineral exploration and mining projects;
- 3) I am a Professional Geologist, registered with the Association of Professional Engineers & Geoscientists of Saskatchewan (APEGSS#10005);
- 4) I have personally inspected the subject project on numerous occasions since 1992, and most recently in March 2016 for two days.
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I, as a Qualified Person, I am independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for sections 4.3, 4.4, and 20, and accept professional responsibility for those sections of this technical report;
- 8) I have been involved with the subject property as an environmental regulator from 1992 to 2002 and provided a variety of consulting services to the operator of the subject property from 2006 to the present.;
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith;
- 10) SRK Consulting (Canada) Inc. was retained by SSR Mining Inc. to prepare a technical audit of the Seabee Gold Operation. The report is based on a review of project files and discussions with SSR Mining Inc. personnel;
- 11) I have not received, nor do I expect to receive, any interest, directly or indirectly, in the Seabee Gold Operation or securities of SSR Mining Inc.; and
- 12) As of the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Saskatoon, Saskatchewan
October 20, 2017

["Original signed and sealed"]
Mark Liskowich, PGeo (APEGSS#10005)
Principal Consultant (Environmental Management)

CERTIFICATE OF QUALIFIED PERSON

To Accompany the report entitled: **NI 43-101 Technical Report for the Seabee Gold Operation, Saskatchewan, Canada, October 20, 2017, with an effective date of December 31, 2016.**

I, Jeffrey Kulas, do hereby certify that:

- 1) I am a Manager, Geology, Mining Operations at the Seabee Gold Operation, at SSR Mining Inc., with an office at Suite 800, Four Bentall Centre, 1055 Dunsmuir Street, Vancouver, British Columbia, Canada;
- 2) I am a graduate of the University of Waterloo in 1994, I obtained a Bachelor of Science degree in Earth Sciences. I have practiced my profession continuously since 1995. I have spent my entire career evaluating and developing narrow vein, underground gold deposits in Saskatchewan, Manitoba and the Northwest Territories;
- 3) I am a Professional Geologist, registered with the Association of Professional Engineers & Geoscientists of Saskatchewan (APEGSS#12374);
- 4) I have been employed at the Seabee Gold Operation since October, 2000 and personally inspected the subject project regularly as part of a rotating shift schedule;
- 5) I have read the definition of Qualified Person set out in National Instrument 43-101 and certify that by virtue of my education, affiliation to a professional association, and past relevant work experience, I fulfill the requirements to be a Qualified Person for the purposes of National Instrument 43-101 and this technical report has been prepared in compliance with National Instrument 43-101 and Form 43-101F1;
- 6) I am employed by the issuer, SSR Mining, and therefore am not independent of the issuer as defined in Section 1.5 of National Instrument 43-101;
- 7) I am the co-author of this report and responsible for sections 14.1 to 14.6 and accept professional responsibility for those sections this technical report;
- 8) I have had prior involvement in the property by working at the Seabee Gold Operation since October, 2000.
- 9) I have read National Instrument 43-101 and confirm that this technical report has been prepared in compliance therewith; and
- 10) As of the effective date of the technical report, to the best of my knowledge, information and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

Laonil Lake, Saskatchewan
October 20, 2017

["Original signed and sealed"]
Jeffrey Kulas, PGeo (APEGSS#12374)
Manager Geology, Mining at Seabee Gold Operation