

Independent Technical Report for the Eskay Creek Au-Ag Project, Canada

Prepared for

Skeena Resources Ltd.



Prepared by

SRK Consulting (Canada) Inc. Effective Date: July 6, 2018 Issue Date: November 1, 2018 2CS042.001

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1 Executive Summary

1.1 Introduction

The Eskay Creek Project is a precious and base metal-rich volcanogenic massive sulphide (VMS) deposit, located in the Golden Triangle of northwestern British Columbia, Canada. Skeena Resources Limited (Skeena) is a Canadian junior mining exploration company focused on developing prospective precious and base metal properties in the Golden Triangle of northwest British Columbia, Canada.

In April 2018, Skeena commissioned SRK Consulting (Canada) Inc. (SRK) to provide Skeena with support and review of the modelled in-house resource model, together with an NI 43-101 compliant resource estimate and NI43-101 report on the Eskay Creek Project. The services were rendered between May and October 2018 leading to the preparation of the mineral resource statement reported herein that was disclosed publicly by Skeena in a news release on September 17, 2018. The effective date of this Technical Report is July 6, 2018.

This Technical Report documents a mineral resource statement for the Eskay Creek Project validated by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM "Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines".

1.2 Property Description and Location

The Eskay Creek Project is located in the Pacific Northwest region of British Columbia, 83 km northwest of Stewart, BC in the Unuk and Iskut River region.

The Project covers a total of 5918.81 hectares (14,625.7 acres) and consists of forty-eight (48) mineral claims and eight (8) mineral leases. There are four net smelter return (NSR) royalty obligations to four third parties on the property.

1.3 Accessibility, Climate, Local Resources, Infrastructure and Physiography

Access to the property is via Highway 37 (Steward Cassiar Highway). The Eskay Mine Road is an all-season gravel road that connects to Highway 37 approximately 135 km north of Meziadin Junction. The Eskay Mine Road is a 54.5 km private industrial road that is operated by Altagas Ltd. (0 km to 43.5 km) and Skeena Resources Ltd. (43.5 km to 54.5 km).

Support services for mining and other resource sector industries in the region are provided primarily from the communities of Smithers (pop. 5,400) and Terrace (pop. 11,500). Both communities are accessible by commercial airlines with daily flights to and from Vancouver.

The region is supported by the Provincial power grid. A 287 kV transmission line extends from a grid connection at Terrace to Bob Quinn, primarily following Highway 37. Power supply opportunities exist close to the Eskay Creek mine site. The Forest Kerr, McLymont, and Volcano

Creek hydroelectric plants are within 20 km of the Eskay Mine site and collectively produce up to 277 MW which is fed to the provincial grid via transmission lines that extend along the Eskay Mine Road.

Eskay Creek lies in the Prout Plateau, a rolling subalpine upland, located on the eastern flank of the Boundary Ranges. The Plateau is characterized by northeast trending ridges with gently sloping meadows occupying valleys between the ridges. Relief over the Plateau ranges from 500 m in the Tom MacKay Lake area to over 1000 m in the Unuk River and Ketchum Creek valleys. Mountain slopes are heavily forested, and scenic features of glacial origin, such as cirques, hanging valleys and over-steepened slopes are present throughout. The Plateau is surrounded by high serrate peaks containing cirque and mountain glaciers.

1.4 History

The Eskay Creek Project has undergone exploration activity dating back to 1932 when prospectors looking for precious metals were first attracted by the gossanous bluffs extending for over seven kilometers beside Eskay and Coulter Creeks. The Tom Mackay Syndicate undertook the first staking in 1932 near the southern end of the claim group. During the period from 1935 to 1938, Premier Gold Mining Company Ltd. held the property under option and were responsible for the definition of 30 zones of surface mineralization including the 21 Zone. This was followed in 1939 by the driving of the 85 m Mackay Adit into the hillside three kilometers south of the current 21A/B Zones by the Tom Mackay Syndicate.

During World War II, from 1940 to 1945, exploration was halted and from 1946 through to 1963 only minor work was done on the property. This work included some minor re-staking along with various changes in claim title.

Western Resources drove the Emma Adit in 1963 with drifting and crosscuts totalling 146 m. In 1964, the property was registered under Stikine Silver Limited.

Seven different options were undertaken on the property between 1964 and 1987. Exploration continued with geological mapping, geochemical and geophysical surveys, trenching and diamond drilling looking for precious metal and VMS-style targets. During this period, in 1986, the company was renamed Consolidated Stikine Silver.

In 1988, Calpine Resources Inc. signed an option agreement to earn a 50% beneficial interest in the TOK and KAY claims by spending \$900,000 over a three-year period. Six diamond drill holes were undertaken in the fall of 1988 near the old 21 Zone trenches. The 21A Zone was discovered with an intercept of 25.78 g/t Au and 38.74 g/t Ag over 29.4 m in drill hole DDH CA88-6. Continued drilling in 1988 and 1989 outlined the 21A Zone and defined the 21B Zone, some 200 m to the north. Prime Resources acquired a controlling interest in Calpine in 1989 and took over managing the Eskay Creek Project. Once their obligations were complete, Prime merged with Calpine in April 1990. At the same time, Homestake Canada Inc. acquired an equity position in Consolidated Stikine Silver and eventually acquired the property. 21B Zone underground development began in 1990-91; a feasibility study was undertaken in 1993 and the Eskay Creek Mine was officially opened in 1995.

From 1995 through 2001, Homestake Canada operated the mine and continued exploration on the surrounding claims with geological mapping, geochemical and geophysical surveys and diamond drilling.

In 2002 Barrick Gold Corp. assumed control of the Eskay Creek mine, continuing with mining operations and exploration until the mine closure in 2008. From 2008 to 2018 the property has been under a state of reclamation, care and maintenance. Skeena entered into an option agreement with Barrick in 2017 and as of the date of this report is undertaking a Phase 1 surface diamond drill program centred upon the 21A, 21C and 22 Zones.

1.5 Geology and Mineralization

The Eskay Creek Project is located along the western margin of the Stikine Terrane, within the Intermontane Tectonic Belt of the Northern Cordillera. It is hosted within the Jurassic rocks of the Stikinia Assemblage at the stratigraphic transition from volcanic rocks of the uppermost Hazelton Group to the marine sediments of the Bowser Lake Group.

The property is underlain by volcanic and sedimentary rocks of the regionally extensive Lower to Middle Jurassic Hazelton Group. The Hazelton Group can be further subdivided into the Jack, Betty Creek, Spatsizi, Iskut River, Mt. Dilworth and Quock Formations (arranged from oldest to youngest). The stratigraphy in the immediate area of the property consists of an upright succession of andesite, marine sediments, intermediate to felsic volcaniclastic rocks, rhyolite, contact mudstone (host to the main Eskay Creek deposits), and basaltic/andesitic sills and flows. This sequence is overlain by mudstones and conglomerates of the Bowser Lake Group. These rocks are folded into a gently, northeast plunging fold termed the Eskay Anticline and are cut by north, northwest and northeastern fault structures. Regional metamorphic grade in the area is lower greenschist facies.

Two types of mineralization are found: 1) stratiform, mudstone-hosted, clastic to massive lenses of sulphide and sulfosalts; and 2) discordant, rhyolite hosted, crustiform stockwork zones of base and precious metal veins.

The stratiform mineralization is hosted in black, carbonaceous mudstone and sericitic tuffaceous mudstones at the contact between the Eskay rhyolite and the overlying basaltic flows (hanging wall andesite). The main zone of mineralization, the 21B Zone, consists of stratiform clastic sulphide-sulfosalt beds. These beds contain fragments of coarse-grained sphalerite, tetrahedrite, Pb-sulfosalts with lesser freibergite, galena, pyrite, electrum, amalgam and minor arsenopyrite. Stibnite occurs locally in late veins and as a replacement of clastic sulphides. Rare cinnabar is associated with the most abundant accumulations of stibnite. At the same stratigraphic horizon as the 21B Zone are the 21A, 21C, 21E and NEX zones. The 21A Zone is characterized by high concentrations of stibnite-realgar, cinnabar and arsenopyrite.

Stratigraphically above the 21B Zone, and usually above the first basaltic sill, the mudstones also host a localized body of base metal rich, relatively precious metal poor mineralization referred to as the HW Zone.

Stockwork and discordant mineralization is hosted in the rhyolite footwall in the Pumphouse, 109, 21A, and 21C Zones. The Pumphouse is characterized by base metal rich veins and veinlets in strongly sericitized and chloritized rhyolite. The 109 Zone comprises gold-rich veins of quartz, sphalerite, galena and pyrite associated with silica flooding and fine-grained carbon. The 21C rhyolite consists of very fine cryptic pyrite with rare sphalerite and galena in sericitized rhyolite. The 21A rhyolite hosted mineralization contains disseminated stibnite, arsenopyrite, tetrahedrite and base-metal rich veinlets.

1.6 Mineral Resource Estimate

The mineral resource estimate for the Project (the "2018 Mineral Resource Estimate") herein was prepared by Skeena Resource using all available information and reviewed and validated by Ms. S. Ulansky, PGeo of SRK Consulting (Canada).

The resource is based upon historical diamond drilling completed by previous Operators. The database used to estimate the Eskay Creek mineral resource contains 7,583 historical surface and underground diamond drill holes totalling 651,332 meters and was audited by SRK. SRK believes the historical drilling information is sufficiently reliable to interpret with confidence the boundaries for gold and silver mineralization domains and that the assaying data is sufficiently reliable to support estimating mineral resources.

A litho-structural model was constructed in Leapfrog Geo[™] software with three main lithologies (rhyolite, contact mudstone and hanging-wall andesite) and 5 faults, recognized as meaningful for modelling purposes. Mineralization domains were subsequently defined by implicit modelling using geologically realistic numeric grade interpolants within major fault blocks. Mineralization domains were created using a 40-50% probability of a nominal combined precious and base metal cut-off grade being greater than 0.9 to 1.0 g/t AuEQ. Although domaining was initially constrained using a combination of gold, silver, lead, zinc, and copper, the primary metals considered for this resource estimate are gold and silver. Ten mineralization domains were created to constrain the estimate: two Pit constrained domains and eight underground domains.

Grades within each domain were reviewed for statistically high outliers, which were then capped before applying 1 meter composites within hard-domain boundaries and using equally distributed composite tails. Gold capping values ranged from 30 to 350 g/t and silver capping values ranged from 200 to 15,000 g/t.

Gold and silver variograms were used to determine the spatial relationship of the elements over distance. Search orientations were created using dynamic anisotropy, whereby a single surface followed the base of the Contact Mudstone contact.

Resources were estimated from drill hole sampling in a model using a parent block size of 3 x 3 x 2 meters and sub-block size of 1 x 1 x 1 meters. Ordinary Kriging (OK) was used for the estimation of gold and silver in all domains, except for the 22 and 21E Domains where an Inverse Distance Squared (ID²) interpolation was selected. The mineral resources were estimated using three passes with increasing search radii based on variogram ranges. Indicated and Inferred resources were categorized during gold interpolation Passes 1 and 2, respectively. The Indicated category

(Pass 1) is defined by blocks interpolated using a minimum of 5 holes and a maximum distance of 30 meters to a drill hole showing reasonable geological and grade continuity. In areas where blocks were interpolated during Pass 1 but continuity is insufficient or blocks were isolated, the blocks were reclassified to Inferred on a visual basis. Inferred resources (Pass 2) were interpolated using a minimum of 3 holes and a maximum distance to a drill hole composite of 60 meters. Due to the lower drill hole density in the 22 and 21E Domains, a minimum of 2 holes were required. A final third pass using three times the variogram range was used to infill any un-estimated blocks. These blocks are uncategorized and are neither Inferred nor Indicated resources. SRK is of the opinion that the current mineral resource estimate is a reasonable representation of the global gold mineral resources at the current level of sampling and can be categorized as Indicated and Inferred based on quality data, data density and geological understanding.

Block tonnage was estimated from volumes using a density formula that was applied using interpolated lead, zinc, copper and antimony grades. This density formula was derived from the historical Operator based on comparisons between actual measurements and analysis at the Eskay Creek mine where $SG = (Pb + Zn + Cu + Sb) \times 0.03491 + 2.67$ (where all metals are reported in percent).

The 21A and 21B Domains have elevated levels of arsenic, mercury and antimony as compared to the rest of the mineralization domains at the Eskay Creek Project. The 21A Domain is geologically and geochemically equivalent to the 21B Domain which accounted for the bulk of mineralization historically mined at Eskay Creek. Blending of the 21B ore with less deleterious material from other domains diluted these penalty elements thus reducing smelter penalties which allowed a profitable head grade to be maintained.

SRK considers mineralization at the Eskay Creek Project to have reasonable prospects for economic extraction, in both Pit domains (21A and 22) and the remaining underground domains (21B, 21Be, 21C, 21E, HW, NEX, Pumphouse and 109). Underground resources occur immediately adjacent to or within 100 m of existing underground infrastructure and, although all historical drift and fill stopes have been backfilled, any potential resources that occur within three meters of any historical working were excluded from the reported resource.

Table 1-1 and Table 1-2 below displays the results of the Pit constrained and potential underground Mineral Resource Estimates for the Eskay Creek Project.

	Grade			Contained Ounces				
	Zone	Tonnes (000)	AuEQ (g/t)	Au (g/t)	Ag (g/t)	AuEQ Ounces (000)	Au Ounces (000)	Ag Ounces (000)
INDICATED	21A	1,088	5.9	4.9	72	207	173	2,533
INFERRED	21A	2,809	4.6	3.8	63	418	342	5,653
INFERRED	22	1,452	3.7	2.5	89	171	116	4,151
TOTAL INDICATED		1,088	5.9	4.9	72	207	173	2,533
TOTAL INFERRED		4,261	4.3	3.3	72	589	458	9,805

Table 1-1: Pit Constrained Mineral Resource statement at a 1.0 g/t AuEQ cut-off grade

			Grade			Со	ntained Our	nces
	Zone	Tonnes (000)	AuEQ (g/t)	Au (g/t)	Ag (g/t)	AuEQ Ounce s (000)	Au Ounces (000)	Ag Ounces (000)
INDICATED	21C	674	9.6	7.5	154	207	163	3,335
INDICATED	21B	338	12.1	8.6	263	132	94	2,855
INDICATED	21BE	246	10.1	6.8	247	80	53	1,954
INDICATED	21E	41	10.8	6.3	337	14	8	441
INDICATED	HW	522	10.2	6.2	295	171	105	4,957
INDICATED	NEX	510	9.6	6.8	209	158	112	3,432
INDICATED	PUMPHOU SE	72	7.9	6.1	140	18	14	323
INDICATED	109	111	9.5	9.4	12	34	34	42
TOTAL INDICATED		2,513	10.1	7.2	215	814	582	17,340
INFERRED	21C	44	7.2	6.7	38	10	10	55
INFERRED	21B	262	10.5	7.8	206	89	66	1,738
INFERRED	21BE	114	15.3	9.5	431	56	35	1,573
INFERRED	21E	53	8.5	4.6	292	14	8	495
INFERRED	HW	87	8.4	5	256	24	14	718
INFERRED	NEX	220	8.5	6.8	130	61	48	922
INFERRED	PUMPHOU SE	30	7.8	6.6	92	8	6	88
INFERRED	109	2	7.4	7.3	8	0.4	0.4	0.4
TOTAL INFERRED		812	10	7.2	214	261	187	5,590

Table 1-2: Underground potential Mineral Resource statement at a 5.5 g/t AuEq cut-off grade

* Notes to accompany the Mineral Resource Estimate statement:

- These mineral resources are not mineral reserves as they do not have demonstrated economic viability. Results are reported in-situ and undiluted and are considered to have reasonable prospects for economic extraction.
- As defined by NI 43-101, the Independent and Qualified Person is Ms. S. Ulansky, PGeo of SRK Consulting (Canada) who has reviewed and validated the Mineral Resource Estimate.
- The effective date of the Mineral Resource Estimate is July 6, 2018.
- The number of metric tonnes and ounces were rounded to the nearest thousand. Any discrepancies in the totals are due to rounding.
- Pit constrained Mineral Resources are reported in relation to a conceptual Pit shell.
- Block tonnage was estimated from volumes using a density formula that was applied using interpolated Pb, Zn, Cu, and Sb. This density formula was derived from the historical operator. SG = (Pb + An + Cu + Sb) * 0.03491 + 2.67 (where all metals are reported in %)
- All composites have been capped where appropriate.
- Pit mineral resources are reported at a cut-off grade of 1 g/t AuEQ and underground mineral resources are reported at a cut-off grade of 5.5 g/t AuEQ.
- Cut-off grades are based on a price of US\$1275 per ounce of gold, US\$17 per ounce silver, and gold recoveries of 80%, silver recoveries of 90%, and without considering revenues from other metals. AuEQ = Au (g/t) + (Ag (g/t)/75)
- Reported underground resources are exclusive of the resources reported within the conceptual Pit shell.
- Estimates use metric units (meters, tonnes and g/t). Metals are reported in troy ounces (metric tonne * grade / 31.10348)
- CIM definitions were followed for the classification of mineral resources.
- Neither the company nor SRK is aware of any known environmental, permitted, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect this mineral resource estimate.

1.7 Interpretation and Conclusions

After conducting a detailed review of all pertinent information and completing the 2018 Mineral Resource Estimate mandate, SRK concludes the following:

- The Eskay Creek deposit is a precious and base metal-rich VMS deposit, hosted in volcanic and sedimentary rocks of the Lower to Middle Jurassic Hazelton Group. Mineralization is contained in several stratiform, disseminated and stock work vein zones that display a wide variety of textural and mineralogical characteristics. In addition to extremely high precious metal grades, Eskay Creek is distinguished from conventional VMS deposits by its association with elements of the 'epithermal suite' (Sb-Hg-As) and the dominance of clastic sulphides and sulfosalts.
- The understanding of the regional geology, lithological and structural controls of the mineralization on the Eskay Creek Project are sufficient to support estimation of Mineral Resources.
- A considerable amount of surface and underground drilling has been completed on the property by various companies since the 1930s. No historical drill core remains for any zones at Eskay Creek. Skeena compiled and reviewed the available historical data to build a validated database to support the current Mineral Resource Estimate.
- The quantity and quality of the lithological, collar and down-the-hole survey data collected are sufficient to support Mineral Resources. Sample data density and distribution is adequate to build meaningful litho-structural models reflective of the overall deposit type.
- SRK reviewed the database and is of the opinion that historical sample preparation, security
 and analytical procedures met industry-standard practices. SRK also believes that the Skeena
 validated database is of a standard that is acceptable for creating an unbiased, representative
 Mineral Resource Estimate of the Eskay Creek deposit.
- SRK reviewed the analytical quality control data accumulated for the Eskay Creek deposit between 1997 and 2004. An analysis of the historical QAQC programs confirmed that sample bias was negligible. SRK confirms that gold and silver grades are reasonably well reproduced and reliable for resource estimation purposes.
- Recovery percent for gold and silver per mining area has been obtained directly from reports by the previous Operator written during their active phase of mining. These recovery factors have been applied into the Mineral Resource Estimate by Skeena and are considered acceptable and appropriate.
- The 21A and 21B Zones, which are both hosted within the Contact Mudstone unit and are geologically and geochemically equivalent, contain high concentrations of As, Hg and Sb. The 21B Zone accounted for the bulk of mineralization historically mined at Eskay Creek, whereas the 21A remains unmined. In the 21B Zone, smelter penalties were often prevented by blending ore with a concentrated sulfosalt assemblage with ore having lower concentrations. This allowed the mine to maintain profitable head grades meanwhile diluting the penalty elements. Deleterious elements are of little importance outside the 21A and 21B Zones. Significant

unmined mineralization exists in the 21C and Pumphouse Zone, which contain low levels of Sb-Hg-As; here mineralization occurs in proximal feeder structures in the footwall rhyolite.

- Despite the substantial precious metal grades and potential base metal credits of the 21A Zone
 it was historically uneconomic to mine. High smelter penalties and prevailing low commodity
 prices were factors that halted mining ambitions. In addition, antimony was treated as a penalty
 element which contributed to the unfavourable economics of the 21A Zone at the time;
 however, market conditions have changed since then and there is now the potential to offer
 antimony by-product credits.
- The 10,000 m Skeena Phase I drilling program commenced on August 15, 2018 and targets the 21A, 21C and 22 Zones, which in addition to grade establishment, will test for metallurgical characteristics.
- In the Pit constrained resource approximately three quarters of the contained metal at a 1.0 g/t AuEQ cut-off grade is classified as Inferred. It is reasonable to expect that the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued drilling.

1.8 Recommendations

Based upon the results of the 2018 Mineral Resource Estimate, SRK recommends the following to improve future geology and resource models:

- Continue to collect SG samples within different lithology types and grade ranges to refine the density model.
- An improved final topography surface is necessary for further studies.
- Assess the metallurgy of the deposit, with focus on the 21A and 21B Zones, to ascertain and gauge economic risk due to the high levels of penalty elements.
- Undertake metallurgical testing for assessment of gold and silver recoveries in the different zones.

In future Resource Models:

- Increase litho-structural snapping tolerances so that subsequent estimation domains are linked at the relevant drill hole interval level.
- Reduce the minimum number of samples from 5 to 3 in the first pass (approximately equal to Indicated) and 3 to 2 in the second pass (approximately equal to Inferred).
- Re-assess the classification criteria in the Pit, in future Resource Models, and consider relaxing the criteria to reflect the easier Pit mining method over underground mining.
- Consider base metals and deleterious elements as spatially unique with variograms created for each element.

- Review high-grade capping values as capping may have been too severe in some domains due to the high percent metal loss. Reconsider sub-domaining if the populations do not maintain stationarity.
- Continue to explore for data and documents by the previous Operator with the intention of conducting a thorough reconciliation review of mined material.
- Initiate and maintain a rigorous QAQC program in current and future drilling campaigns.
- Continued validation of historical mining processes and procedures are necessary to develop the project further.
- Dewater (where necessary) and re-survey a portion of the underground workings to qualify the extent of the depletion buffer.

Table of Contents

1	Exe	ecutive Summary	iii
	1.1	Introduction	iii
	1.2	Property Description and Location	iii
	1.3	Accessibility, Climate, Local Resources, Infrastructure and Physiography	iii
	1.4	History	iv
	1.5	Geology and Mineralization	v
	1.6	Mineral Resource Estimate	vi
	1.7	Interpretation and Conclusions	ix
	1.8	Recommendations	x
2	Intr	oduction and Terms of Reference	20
	2.1	Scope of Work	20
	2.2	Work Program	20
	2.3	Basis of Technical Report	21
	2.4	Qualifications of SRK and Skeena Team	21
	2.5	Site Visit	23
	2.6	Acknowledgement	23
	2.7	Declaration	23
3	Rel	iance on Other Experts	24
4	Pro	perty Description and Location	25
	4.1	Mineral Tenure	27
	4.2	Royalty Obligations	32
	4.3	Agreement with Barrick Gold Inc.	34
5	Aco	cessibility, Climate, Local Resources, Infrastructure and Physiography	35
	5.1	Accessibility	35
	5.2	Local Resources and Infrastructure	35
		5.2.1 Mine Site Infrastructure	
	5.3	Climate and Vegetation	
		5.3.1 Climate 37	
		5.3.2 Vegetation	
	5.4	Physiography	
6	His	tory	40
	6.1	Past Production	45
7	Ge	ological Setting and Mineralization	47
	7.1	Regional Geology	47

	7.2 Property Geology	.51
	7.2.1 Stratigraphy	.51
	7.2.2 Intrusive Rocks	.54
	7.2.3 Structure	.54
	7.2.4 Alteration	. 55
	7.2.5 Mineralization	.55
	7.2.6 Stratiform Style Mineralization	. 59
	7.2.7 Discordant Style Mineralization	. 62
8	Deposit Types	.65
9	Exploration	.67
10	Drilling	.68
	10.1 Surface Drilling	.73
	10.1.1 Site Reclamation	.73
	10.2 Underground Drilling	.74
11	Sample Preparation, Analyses, and Security	.75
	11.1 Pre-2004 Analysis	.75
	11.1.1 Sample Preparation and Assaying Procedures	.75
	11.1.2 QAQC Verifications 1997 to 2003	.76
	11.2 2004 Analysis	.77
	11.2.1 Sample Preparation and Assaying Procedures	.77
	11.2.2 QAQC Verifications 2004	.77
	11.3 Specific Gravity Analysis	.78
	11.4 Analysis by Skeena	.79
	11.5 SRK Comments	. 82
12	Data Verification	.83
	12.1 Verifications by SRK	.83
	12.1.1 Database	. 83
	12.1.2Site Visit	.84
	12.1.3 Verifications of Analytical Quality Control Data	. 85
	12.1.4 Summary – Verifications by SRK	.96
13	Mineral Processing and Metallurgical Testing	.97
14	Mineral Resource Estimates	.99
	14.1 Introduction	.99
	14.2 Resource Estimation Procedures	.99
	14.3 Resource Database	100
	14.4 Solid Body Modelling	102

	14.4.13D Litho-Structural Model								
	14.4	4.2Minera	lization Domaining						
	14.4	4.3Under	ground Workings	105					
	14.5 Data Analysis								
	14.6 Evaluation of Outliers								
	14.7 Compositing								
	14.8 Var	riography.		113					
	14.9 Dyr	namic Ani	sotropy	117					
	14.10	Specific	Gravity	118					
	14.11	Block M	odel and Grade Estimation	119					
	14.12	Model V	alidation	122					
	14.1	12.1	Visual Validation	122					
	14.1	12.2	Comparison of Interpolation Models	124					
	14.1	12.3	Swath Plots (Drift Analysis)	125					
	14.13	Mineral	Resource Classification	126					
	14.14	Mineral	Resource Statement	129					
	14.15	Grade S	ensitivity Analysis	135					
15	Adjace	nt Prope	rties	136					
16	Other F	Relevant	Data and Information	139					
17	Interpre	etation a	nd Conclusions	140					
	17.1 Mir	neral Tenu	are, Surface Rights, Agreements, and Royalties	140					
	17.2 Ge	ology and	Mineralization	140					
	17.3 Exp	oloration,	Drilling and Data Analysis	140					
	17.4 Me	tallurgy		141					
	17.5 Mir	neral Reso	purce Estimation	141					
18	Recom	mendati	ons	143					
19	Referer	nces		145					
20	Date and Signature Page149								

List of Tables

Table 1-1:	Pit Constrained Mineral Resource statement at a 1.0 g/t AuEQ cut-off grade	vii
Table 1-2:	Underground potential Mineral Resource statement at a 5.5 g/t AuEq cut-off grade	viii
Table 2-1:	Qualified Persons who prepared or contributed to the Technical Report	22
Table 2-2:	Other Experts who assisted with the Qualified Persons	22
Table 4-1:	Mineral claim information	29
Table 4-2:	Mineral tenure information	31
Table 4-3:	Summary of Eskay Creek Project royalty obligations	32
Table 6-1:	Summary of exploration on the Eskay Creek Project	41
Table 6-2:	Historical gold and silver production during the mine life at Eskay Creek	45
Table 7-1:	Regional stratigraphy of the Iskut River region	47
Table 7-2:	Iskut River region plutonic rock suite (After MDRU, 1992)	47
Table 7-3:	Notable mineral deposits located in the Iskut River region	49
Table 7-4:	Stratigraphic framework for the Hazelton Group	50
Table 7-5:	Summary of mineralized zones at Eskay Creek (after Roth et al., 1999)	58
Table 10-1	: Summary of drilling on the Eskay Creek Project	69
Table 11-1	: Summary of historical analytical quality control data on the Eskay Creek Project	76
Table 11-2	: Summary of historical analytical quality control data on the Eskay Creek Project	78
Table 11-3	: Lower detection limit (LDL) changes in the Database	80
Table 12-1	: Drilling and sampling years versus QAQC procedure in place	86
Table 12-2	: Acme in-house standards used during 2002, 2003, and 2004	89
Table 12-3	: List of the Eskay mine lab standard types and their accepted results	93
Table 13-1	: Gold and silver mill recoveries by zone at the Eskay Creek Project	97
Table 13-2	: Parameters used for metallurgical designation	97
Table 13-3	: Eskay Creek mine production from 1994 to 2008	98
Table 14-1	: Summary statistics for the drill hole gold and silver assays by domain1	08
Table 14-2	: Summary statistics for the drill hole base metal assays by domain 1	09
Table 14-3	: Summary statistics for the drill hole deleterious element assays by domain 1	10
Table 14-4	: Gold and silver assay capped grades1	11
Table 14-5	: Comparison of capped assay data to 1 m composites1	13
Table 14-6	: Variogram parameters for gold by domain1	14

Table 14-7: Variogram parameters for silver by domain	. 115
Table 14-8: Details of block model dimensions and block size	. 119
Table 14-9: Gold grade estimation parameters by domain	. 120
Table 14-10: Silver grade estimation parameters by domain	. 121
Table 14-11: Global bias check for gold and silver by domain	. 125
Table 14-12: Assumptions considered for conceptual open Pit optimization	. 130
Table 14-13: Assumptions considered for underground resource reporting	. 130
Table 14-14: Pit constrained* Mineral Resource Statement reported at a 1.0 g/t AuEQ cut-off grade	. 131
Table 14-15: Underground Mineral Resource Statement reported at a 5.5 g/t AuEQ cut-off grade	. 132
Table 14-16: Block model quantities and grade estimates for the Pit constrained resource	. 135
Table 15-1: Summary table of notable third-party properties in the Iskut River region	. 137

List of Figures

Figure 4-1:	Location of the Eskay Creek Project	26
Figure 4-2:	Eskay Creek Project land tenure map	28
Figure 4-3:	Mining leases and royalty agreements	33
Figure 5-1:	Access to the Eskay Creek Project	36
Figure 5-2:	View of Eskay Creek valley looking northeast	39
Figure 6-1:	Historical underground workings looking east	46
Figure 7-1:	Regional geology of the Iskut River area	48
Figure 7-2:	Eskay Creek stratigraphic section (modified after Gale et al., 2004)	52
Figure 7-3:	Property-scale geology of the Eskay Creek Project area	53
Figure 7-4:	Plan view of the spatial distribution of the mineralization zones at the Eskay Creek	57
Figure 7-5:	21B Zone - Tetrahedrite-sphalerite-galena-stibnite beds within the Contact Mudstone	60
Figure 7-6:	NEX Zone - Massive sulphides containing local chalcopyrite within the Contact Mudstone	62
Figure 7-7:	HW Zone – Massive strata-bound sulphide lenses within the hanging wall mudstone	63
Figure 7-8:	109 Zone - Stockwork veins of quartz-sphalerite-galena-pyrite-gold in the Eskay Rhyolite	64
Figure 8-1:	Genetic model for the development of the 21 Zone orebodies (Roth et al., 1999)	66
Figure 10-1	: Distribution of historical surface drill holes	71
Figure 10-1 Figure 10-2	 Distribution of historical surface drill holes Distribution of historical underground drill holes 	71 72
Figure 10-1 Figure 10-2 Figure 12-1	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing 	71 72 85
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) 	71 72 85 87
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) 	71 72 85 87 87
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign 	71 72 85 87 87 88
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4 Figure 12-5	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign Gold Pulp repeat samples from the 2001 drilling campaign 	71 72 85 87 87 88 88
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-6	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign Gold Pulp repeat samples from the 2001 drilling campaign Acme in-house standard (DS3) inserted during the 2002 drilling campaign 	71 72 85 87 87 88 88 89 90
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-6 Figure 12-7	 Distribution of historical surface drill holes	71 72 85 87 87 88 89 90 90
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-6 Figure 12-7 Figure 12-8	 Distribution of historical surface drill holes	 71 72 85 87 88 89 90 90 91
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-6 Figure 12-7 Figure 12-8 Figure 12-9	 Distribution of historical surface drill holes Distribution of historical underground drill holes. Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign Gold Pulp repeat samples from the 2001 drilling campaign Acme in-house standard (DS3) inserted during the 2002 drilling campaign Acme in-house standard (DS4) during the 2003 drilling campaign Acme in-house standard (DS5) during the 2003 drilling campaign 	 71 72 85 87 88 89 90 90 91 92
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-7 Figure 12-8 Figure 12-9 Figure 12-1	 Distribution of historical surface drill holes Distribution of historical underground drill holes. Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign Gold Pulp repeat samples from the 2001 drilling campaign Acme in-house standard (DS4) inserted during the 2002 drilling campaign Acme in-house standard (DS4) during the 2003 drilling campaign Acme in-house standard (DS5) during the 2003 drilling campaign Standard ESK14-1 from the 2004 drilling campaign 	 71 72 85 87 88 89 90 90 91 92 94
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-7 Figure 12-8 Figure 12-9 Figure 12-1	 Distribution of historical surface drill holes	 71 72 85 87 88 89 90 90 91 92 94 94
Figure 10-1 Figure 10-2 Figure 12-1 Figure 12-2 Figure 12-3 Figure 12-3 Figure 12-4 Figure 12-5 Figure 12-7 Figure 12-7 Figure 12-1 Figure 12-1 Figure 12-1	 Distribution of historical surface drill holes Distribution of historical underground drill holes Drill hole locations with labelled casing Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) Gold pulp repeat samples from the 1999 drilling campaign Gold Pulp repeat samples from the 2001 drilling campaign Acme in-house standard (DS3) inserted during the 2002 drilling campaign Acme in-house standard (DS4) during the 2003 drilling campaign Acme in-house standard (DS5) during the 2003 drilling campaign Standard ESK14-1 from the 2004 drilling campaign Standard ESK12-1 from the 2004 drilling campaign 	 71 72 85 87 88 89 90 90 91 92 94 95

Figure 14-1: Surface plan view of the 7,583 validated diamond drill holes 101
Figure 14-2: Simplified litho-structural model used to create the 2018 mineralization domains
Figure 14-3: Mineralization domains at the Eskay Creek Project
Figure 14-4: Plan view of historical underground mine workings at the Eskay Creek Project 106
Figure 14-5: Long section of the historical underground mine workings 107
Figure 14-6: Histogram and statistics of assay sample lengths at Eskay Creek 112
Figure 14-7: Gold search ellipses (in grey) used for variography by domain 116
Figure 14-8: Oblique section of dynamic anisotropy vectors
Figure 14-9: Tested vs calculated SG 118
Figure 14-9: Tested vs calculated SG118Figure 14-10: Visual validation of block model gold grades vs composite gold grades
Figure 14-9: Tested vs calculated SG
Figure 14-9: Tested vs calculated SG
Figure 14-9: Tested vs calculated SG. 118 Figure 14-10: Visual validation of block model gold grades vs composite gold grades 123 Figure 14-11: Visual validation of block and composite grades on section 10000N 124 Figure 14-12: Swath plot of domain 21C 126 Figure 14-13: Long section view of the mineral resource classification blocks looking east 128
Figure 14-9: Tested vs calculated SG.118Figure 14-10: Visual validation of block model gold grades vs composite gold grades
Figure 14-9: Tested vs calculated SG.118Figure 14-10: Visual validation of block model gold grades vs composite gold grades123Figure 14-11: Visual validation of block and composite grades on section 10000N124Figure 14-12: Swath plot of domain 21C126Figure 14-13: Long section view of the mineral resource classification blocks looking east128Figure 14-14: Pit constrained resources of the 21A and 22 Zones133Figure 14-15: Oblique view of underground resources remaining in the Eskay Creek Project134

Appendices

Appendix A: Drill holes excluded from the Mineral Resource Estimate

2 Introduction and Terms of Reference

The Eskay Creek Project is a precious and base metal-rich volcanogenic massive sulphide (VMS) deposit, located in Canada. It is located 83 km northwest of Stewart, BC in the Unuk and Iskut River region. Skeena Resources Limited (Skeena) is a junior Canadian mining exploration company focused on developing prospective precious and base metal properties in the Golden Triangle of northwest British Columbia, Canada.

In April 2018, Skeena commissioned SRK Consulting (Canada) Inc. (SRK) to provide Skeena with support and review of the modelled in-house resource model, together with an NI 43-101 compliant resource estimate and NI43-101 report on the Eskay Creek Project. The services were rendered between May and October 2018 leading to the preparation of the mineral resource statement reported herein that was disclosed publicly by Skeena in a news release on September 17, 2018 with an effective date of this Technical Report as September 18, 2018.

This Technical Report documents a mineral resource statement for the Eskay Creek Project validated by SRK. It was prepared following the guidelines of the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1. The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM *"Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines"*.

2.1 Scope of Work

The scope of work, as defined in a letter of engagement executed on April 27, 2018 between Skeena and SRK, was to provide Skeena with ongoing support and review of the modelled inhouse resource that will be used for preliminary engineering studies and for targeting of confirmation drilling in the summer of 2018. The resource model will be accompanied by an NI 43-101 compliant resource estimation report published by SRK. This work involved the review and assessment of the following aspects of this project:

- Review of litho-structural model;
- Review of the data;
- Design and review of estimation methodology and classification;
- Resource validation
- Preparation of a mineral resource statement; and
- Recommendations for additional work.

2.2 Work Program

The Mineral Resource Estimate is the result of a collaborative effort between Skeena and SRK personnel. The database was compiled and maintained by Skeena and was subsequently audited by SRK. The litho-structural model was created by an Independent Consultant and then reviewed

In the opinion of SRK, the geological model reasonably represents mineralization at the current level of sampling and understanding of mineralization controls. Geostatistical analyses, variography and grade models were validated by SRK during August 2018. The Mineral Resource Statement was validated and disclosed publicly in a news release dated September 17, 2018.

The Mineral Resource Statement reported herein was prepared in conformity with generally accepted CIM "*Exploration Best Practices*" and "*Estimation of Mineral Resource and Mineral Reserves Best Practices*" guidelines. This technical report was prepared following the guidelines of the Canadian Securities Administrators National Instrument 43-101 and Form 43-101F1.

The Technical Report was assembled in Vancouver, Canada during September and October 2018.

2.3 Basis of Technical Report

This report is based on information provided to SRK by Skeena throughout the course of SRK's investigations. SRK performed a site visit to the Eskay Creek Property between the 27th and 28th of June 2018 and has no reason to doubt the reliability of the information provided. This Technical Report is based on the following sources of information:

- Review of exploration data collected by Skeena;
- Inspection of the Eskay Creek Project area, including outcrop and drill core surface collars; and
- Discussions with Skeena personnel.

2.4 Qualifications of SRK and Skeena Team

The SRK Group comprises over 1,000 professionals, offering expertise in a wide range of resource engineering disciplines. The SRK Group's independence is ensured by the fact that it holds no equity in any project and that its ownership rests solely with its staff. This fact permits SRK to provide its clients with conflict-free and objective recommendations on crucial judgment issues. SRK has a demonstrated track record in undertaking independent assessments of Mineral Resources and Mineral Reserves, project evaluations and audits, technical reports and independent feasibility evaluations to bankable standards on behalf of exploration and mining companies and financial institutions worldwide. The SRK Group has also worked with a large number of major international mining companies and their projects, providing mining industry consultancy service inputs.

The resource evaluation work and the compilation of this Technical Report was completed by Ms. Kathi Dilworth under the supervision of the Qualified Person, Ms. Sheila Ulansky, PGeo (Table 2-1). The Qualified Person meets the requirements of independence as defined in NI 43-101. The names and details of Other Experts who have contributed to this Technical Report are listed in Table 2-2.

Mr. Marek Nowak (PEng), Principal Geostatistician with SRK, reviewed drafts of the Technical Report prior to delivery to Skeena as per SRK internal quality management procedures. Mr. Nowak did not visit the Project.

SRK Experts	Position	Employer	Independence of Skeena	Date of Last Site Visit	Prof. Designation	Responsibility
Ms. S. Ulansky	Senior Resource Geologist	SRK Consulting (Canada)	Yes	Jun-18	PGeo	Qualified Person
Dr. R. Uken	Principal Structural Geologist	SRK Consulting (Canada)	Yes	n/a	Pr.Sci.Nat	3D Litho- Structural Model
Mr. G. Carlson	Senior Mining Engineer	SRK Consulting (Canada)	Yes	n/a	PEng	Open Pit Optimization
Mr. M. Nowak	Principal Geostatistician	SRK Consulting (Canada)	Yes	n/a	PEng	Peer Review

 Table 2-1: Qualified Persons who prepared or contributed to the Technical Report

Table 2-2: C	Other Experi	s who assisted	d with the Qual	ified Persons
--------------	--------------	----------------	-----------------	---------------

Other Experts	Position	Employer	Independence of Skeena
Ms. K. Dilworth	Senior Resource Geologist	Skeena Resources	No
Mr. P. Geddes	VP, Exploration & Resource Development	Skeena Resources	No
Mr. M. Mayer	Manager, Technical Services	Skeena Resources	No
Mr. C. Russell	Exploration Manager	Skeena Resources	No
Mr. A Newton	Exploration Manager	Skeena Resources	No
Mr. J. Himmelright	VP, Sustainability	Skeena Resources	No
Ms. A. Rainbow	Independent Consultant	1069244 BC Ltd.	Yes

2.5 Site Visit

In accordance with National Instrument 43-101 guidelines, Ms. Ulansky of SRK visited the Eskay Creek Project on June 27 and June 28, 2018 accompanied by Ms. Dilworth and Mr. Himmelright of Skeena.

The purpose of the site visit was to see localities that had been described in earlier reports firsthand and validate the areas with an independent check. The mine buildings, and portals were sitechecked and observed to be maintainable. Historical surface drill hole collars were located without any trouble because many of them had been cased and clearly marked with drill hole identifiers. SRK validated the surface location of a number of these drill holes with GPS recordings, which have been logged accurately in Skeena's drill hole database.

2.6 Acknowledgement

SRK would like to acknowledge the support and collaboration provided by Skeena personnel for this assignment. Their collaboration was greatly appreciated and instrumental to the success of this project.

2.7 Declaration

SRK's opinion contained herein and effective **July 6, 2018** is based on information collected by SRK throughout the course of SRK's investigations, which in turn reflect various technical and economic conditions at the time of writing. 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 Skeena and neither SRK nor any affiliate has acted as advisor to Skeena 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

Skeena contributors to this report include Ms. Dilworth, Mr. Meyers, Mr. Russel, Mr. Newton and Mr. Himmelright. Not all the authors of this report have met the current requirements of a "Qualified Person", but all work has been performed under the supervision of independent Qualified Persons.

SRK has not performed an independent verification of land title and tenure information as summarized in Section 4-1 of this report. SRK did not verify the legality of any underlying agreements(s) that may exist concerning the permits or other agreement(s) between third parties.

SRK was informed by Skeena that there are no known litigations potentially affecting the Eskay Creek Project.

4 **Property Description and Location**

The Eskay Creek Project is located in the Golden Triangle region of British Columbia, Canada, 83 km northwest of Stewart, in the eastern flanks of the Coast Mountain ranges. The mine is located at an elevation of 800 m above sea level at 56° 39' 13.9968" N and 130° 25' 44.0004" W.

The mine is located near the Unuk River, and is accessible by a 58.5 km, all-weather road, which departs from the Stewart-Cassiar Highway (Highway 37) just south of the Bob Quinn airstrip. This road travels along the eastern side of the Iskut River for a distance of 38 km to its junction with the Volcano Creek drainage system. The road then follows Volcano Creek to its headwaters and then down Tom Mackay Creek to the mine site (Figure 4-1).

There are no known federal, provincial or regional parks, wilderness or conservancy areas, ecological reserves, or recreational areas near the Eskay Creek Property. The area is within the Traditional Territory assertions of the Tahltan Central Government and Skii km Lax Ha.



4.1 Mineral Tenure

The status of all mining titles was verified using Mineral Titles Online ("MTO"), the British Columbia government's online mineral titles administration system at:

http://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mineral-titles/mineral-placer-titles/mineraltitlesonline.

The Eskay Creek Project covers a total of 5,918.81 hectares (14,625.70 acres) and is comprised of the following (Figure 6-1):

- Forty-eight (48) mineral claims totaling 4,088.55 hectares (10,103.02 acres) (Table 4-1);
- Eight (8) mineral leases totaling 1,830.26 hectares (4,522.66 acres) (Table 4-2).

One (1) mineral claim is 100% registered to Skeena Resources Limited, forty-four (44) mineral claims are 100% held by Barrick Gold Inc., and three (3) mineral claims are held 66.67% Barrick Gold Inc. and 33.33% Canarc Resource Corp. Five (5) mineral leases are 100% held by Barrick Gold Inc. and three (3) mineral leases are held 66.67% Barrick Gold Inc. and 33.33% Canarc Resource Corp. Resource Corp.



Table 4-1: Mineral claim information

Tenure	Claim Name	Туре	Description	Issue Date	Good to Date	Area (Hectares)	Tag Number	Owner Name	Percent	Owner Name	Percent
352542	Star 1	MC2	Two Post Claim	13-Nov-1996	13-Nov-2018	25.00	663641M	Barrick Gold Inc.	100		
352546	Sliver West	MC4	Four Post Claim	13-Nov-1996	13-Nov-2018	100.00	229668	Barrick Gold Inc.	100		
1056639	Melissa	МСХ	Mineral Cell Title Submission	24-Nov-2017	24-Nov-2018	53.36	<null></null>	Skeena Resources Ltd.	100		
352974	Star 21	MC4	Four Post Claim	7-Dec-1996	7-Dec-2018	250.00	229671	Barrick Gold Inc.	100		
352975	Star 22	MC4	Four Post Claim	7-Dec-1996	7-Dec-2018	150.00	229672	Barrick Gold Inc.	100		
300298	P-1	MC2	Two Post Claim	11-Jun-1991	20-May-2019	25.00	638266M	Barrick Gold Inc.	100		
300299	P-2	MC2	Two Post Claim	11-Jun-1991	20-May-2019	25.00	638267M	Barrick Gold Inc.	100		
300300	P-3	MC2	Two Post Claim	11-Jun-1991	20-May-2019	25.00	638268M	Barrick Gold Inc.	100		
300301	P-4	MC2	Two Post Claim	11-Jun-1991	20-May-2019	25.00	638269M	Barrick Gold Inc.	100		
329241	Mack 23	MC4	Four Post Claim	21-Jul-1994	21-Jul-2019	500.00	225674	Barrick Gold Inc.	100		
329244	Mack 1	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654620M	Barrick Gold Inc.	100		
329245	Mack 2	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654619M	Barrick Gold Inc.	100		
329246	Mack 3	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654617M	Barrick Gold Inc.	100		
329247	Mack 4	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654618M	Barrick Gold Inc.	100		
329248	Mack 5	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654621M	Barrick Gold Inc.	100		
329249	Mack 6	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654622M	Barrick Gold Inc.	100		
329252	Mack 9	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654625M	Barrick Gold Inc.	100		
329253	Mack 10	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654626M	Barrick Gold Inc.	100		
329254	Mack 11	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654627M	Barrick Gold Inc.	100		
329255	Mack 12	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654628M	Barrick Gold Inc.	100		
329256	Mack 13	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654629M	Barrick Gold Inc.	100		
329257	Mack 14	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654630M	Barrick Gold Inc.	100		
329258	Mack 15	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654631M	Barrick Gold Inc.	100		
329259	Mack 16	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654632M	Barrick Gold Inc.	100		
329260	Mack 17	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654513M	Barrick Gold Inc.	100		
329261	Mack 18	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654514M	Barrick Gold Inc.	100		
329262	Mack 19	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654515M	Barrick Gold Inc.	100		

Tenure	Claim Name	Туре	Description	Issue Date	Good to Date	Area (Hectares)	Tag Number	Owner Name	Percent	Owner Name	Percent
329263	Mack 20	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654516M	Barrick Gold Inc.	100		
329264	Mack 21	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654517M	Barrick Gold Inc.	100		
329265	Mack 22	MC2	Two Post Claim	21-Jul-1994	21-Jul-2019	25.00	654518M	Barrick Gold Inc.	100		
512867	<null></null>	МСХ	Mineral Cell Title Submission	17-May-2005	21-Jul-2019	106.81	<null></null>	Barrick Gold Inc.	100		
512881	<null></null>	мсх	Mineral Cell Title Submission	18-May-2005	21-Jul-2019	17.80	<null></null>	Barrick Gold Inc.	100		
252976	IKS 2	MC4	Four Post Claim	2-Aug-1989	2-Aug-2019	500.00	97944	Barrick Gold Inc.	100		
329363	Mack 26 FR.	MCF	Fractional Claim	3-Aug-1994	3-Aug-2019	25.00	225683	Barrick Gold Inc.	100		
252965	Cal #1	MC4	Four Post Claim	5-Aug-1989	5-Aug-2019	500.00	53273	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
252966	Cal #2	MC4	Four Post Claim	5-Aug-1989	5-Aug-2019	500.00	53274	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
252967	Cal #3	MC4	Four Post Claim	6-Aug-1989	6-Aug-2019	400.00	111599	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
365539	Kay 1	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681963M	Barrick Gold Inc.	100		
365541	Kay 3	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681965M	Barrick Gold Inc.	100		
365542	Kay 4	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681966M	Barrick Gold Inc.	100		
365543	Kay 5	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681967M	Barrick Gold Inc.	100		
365544	Kay 6	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681968M	Barrick Gold Inc.	100		
365545	Kay 7	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681969M	Barrick Gold Inc.	100		
365546	Kay 8	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681970M	Barrick Gold Inc.	100		
365547	Kay 9	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681971M	Barrick Gold Inc.	100		
365548	Kay 10	MC2	Two Post Claim	12-Sep-1998	12-Sep-2019	25.00	681972M	Barrick Gold Inc.	100		
512879	<null></null>	MCX	Mineral Cell Title Submission	18-May-2005	12-Sep-2019	35.58	<null></null>	Barrick Gold Inc.	100		
253199	Cal #4	MC4	Four Post Claim	16-Sep-1989	16-Sep-2019	100.00	116537	Barrick Gold Inc.	100		

Table 4-2: Mineral tenure information

Tenure #	Issue Date	Good to Date	Term Expiry Date	Area (Hectares)	Owner	Percent	Owner	Percent
329944	6-Dec-1994	6-Dec-2018	6-Dec-2024	395.00	Barrick Gold Inc.	100		
254580	17-Dec-1990	17-Dec-2018	17-Dec-2020	41.80	Barrick Gold Inc.	100		
316357	30-Apr-1994	30-Apr-2019	30-Apr-2024	276.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
316358	30-Apr-1994	30-Apr-2019	30-Apr-2024	367.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
316359	30-Apr-1994	30-Apr-2019	30-Apr-2024	278.70	Canarc Resource Corp.	33.33	Barrick Gold Inc.	66.67
306611	1-Jun-1992	1-Jun-2019	1-Jun-2022	41.80	Barrick Gold Inc.	100		
306627	1-Jun-1992	1-Jun-2019	1-Jun-2022	355.00	Barrick Gold Inc.	100		
306286	13-Aug-1991	13-Aug-2019	13-Aug-2021	73.56	Barrick Gold Inc.	100		

4.2 Royalty Obligations

The Eskay Creek Project has net smelter return (NSR) royalty obligations on 4 properties payable to third parties as shown in Table 4-3. A map of the claims with royalty obligations is presented in Figure 4-3.

Parcel	Royalty
Kay-Tok Property	1% NSR in favour of Franco-Nevada Corp. (1)
 Kay Mining Leases Tok Mining Leases 	w/o duplication of the following and depending on the handling of the Product:
	1% Net Smelter Returns, 1% Net Ore Returns, 1% Net Returns payable from the disposition of the beneficiated product of all metals, minerals and mineral substances.
	Barrick has the right of first refusal to purchase the royalty.
	No cap or buyout provision of this royalty.
IKS Property	2% NSR in favour of ARC Resource Corporation (2)
 IKS 1 Mining Lease 	Royalty also includes the area known as the IKS Gap.
 IKS 2 Mining Claim 	No cap on royalty payments.
	No buyout provision or rights of first refusal on the sale of the royalty.
GNC Property	2% NSR in favour of ARC Resource Corporation (3)
GNC 1-3 Mining Leases	Interest: Barrick 66.67%; Canarc 33.33%
	No cap on royalty payments.
	No buyout provision or rights of first refusal on the sale of the royalty.
Star Property	1% NSR in favour of David A. Javorsky (4)
• Star 1, 21, 22	No cap on royalty payments.
 Sliver West Mining Claims 	The Option to Purchase the Royalty has expired.

 Table 4-3:
 Summary of Eskay Creek Project royalty obligations

- Amended and Restated Eskay Creek Royalty Agreement, dated May 5, 1995 between Prime Resources Group Inc. (now Barrick) and Euro-Nevada Mining Corporation Limited (now Franco-Nevada Corp.)
- 2. Transfer and Assignment Agreement dated December 22, 1994 between Prime Resources Group Inc. & Stikine Resources Ltd. (both now Barrick) and Adrian Resources Ltd.

This agreement references the Royalty Deed dated August 1, 1990 between ARC Resource Group Ltd. and Adrian Resources Ltd.

3. Option and Joint Venture Agreement dated November 4, 1988 between Canarc Resources Corp and Calpine Resources Incorporated (now Barrick)

This agreement is subject to the royalty provisions of an Option Agreement dated November 4, 1988 between Canarc Resources Corp. and Arc Resources Group Ltd.

4. NSR Royalty Agreement w/ Option to Purchase dated November 3, 2004 between Homestake Canada Inc. (now Barrick) and David A. Javorsky



4.3 Agreement with Barrick Gold Inc.

On December 18, 2017, Skeena and Barrick Gold Inc. entered into an Option Agreement on the Eskay Creek Property. This agreement affects all mineral claims and mineral leases that comprise the Eskay Creek Property, except for the 1 mineral claim registered to Skeena Resources Ltd. Skeena has the option to acquire all of Barrick's rights, title and interest in and to the Eskay Creek Assets (Property and all Facilities, the Coast Road and the Barrick/Coast Road Use Agreement, the Permits (including the Barrick Road Special Use Permit), and the Eskay Creek Contracts) by completing \$3,500,000 in Expenditures by December 18, 2020. Skeena shall pay Barrick the aggregate amount of Barrick Expenditures during the Option Period plus \$10,000,000 (assuming the environmental bond is estimated at \$7,700,000, with a closing payment not exceeding \$17,700,000).

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

Access to the Eskay Creek Project is via Highway 37 (Stewart Cassiar Highway). The Eskay Mine Road is an all-season gravel road that connects to Highway 37 approximately 135 km north of Meziadin Junction (Figure 5-1). The Eskay Mine Road is a 54.5 km private industrial road that is operated by Altagas Ltd. (0 km to 43.5 km) and Skeena Resources Ltd. (43.5 km to 54.5 km).

There are two nearby gravel air strips; Bronson Strip which is about 40 km west of the mine site and Bob Quinn, roughly 37 km northeast of the Eskay Creek Project. Bronson Strip is a private air strip operated by Snip Gold Corporation. It is 1500 m long and in fair condition. The Bob Quinn Strip is managed by the Bob Quinn Lake Airport Society, a not-for-profit organization comprised of residents and local business interests. The airstrip is about 1300 m long and in good condition.

5.2 Local Resources and Infrastructure

The Eskay Creek Project is located in the Pacific northwest region of British Columbia, Canada. Support services for mining and other resource sector industries in the region are provided primarily by the communities of Smithers (pop. 5,400) and Terrace (pop. 11,500). Both communities are accessible by commercial airlines with daily flights to and from Vancouver. Volume freight service in the region is supported by rail connections that extend from tidewater ports in Prince Rupert and Vancouver. The closest tidewater port to the project is located in Stewart, approximately 260 km from the Project. Stewart is an ice-free shipping location and provides access for bulk shipping 365 days/year.

Road infrastructure in the region is well developed. Highway 16 (Yellowhead Highway) extends from Prince George in central British Columbia, through several communities including Smithers and Terrace, and terminates at the Port of Prince Rupert. Highway 37 (Stewart Cassiar Highway) connects to Highway 16 at Kitwanga and extends to the Alaska Highway in the Yukon. The Eskay Mine Road connects to Highway 37 roughly 295 km from Kitwanga. Driving time from either Smithers or Terrace to the Eskay Creek Project is approximately 5 hours.

The region is supported by the Provincial power grid. A 287 kV transmission line extends from a grid connection at Terrace to Bob Quinn, primarily following Highway 37. Power supply opportunities exist close to the Eskay Creek Project. The Forest Kerr, McLymont, and Volcano Creek hydroelectric plants are within 20 km and collectively produce up to 277 MW which is fed to the provincial grid via transmission lines that extend along the Eskay Mine Road.

Services, workforce, supply chains, and infrastructure are all well established in the region to support mining operations.


5.2.1 Mine Site Infrastructure

The Eskay Creek mine site still retains much of the infrastructure that supported previous operations. This infrastructure is still in serviceable condition and includes residences, mine offices, machine shop, carpentry shop, warehouse, fuel storage, power plant, underground workings and access, water management and treatment facilities, waste management facilities, and tailings storage facilities. The operations are currently closed but actively managed with ongoing maintenance and monitoring activities being carried out by a caretaker who visits the site on an as needed basis.

5.3 Climate and Vegetation

5.3.1 Climate

Climate conditions in this mountainous region are highly variable and location dependent (Hallam Knight Piesold Ltd, 1993). During the initial environmental baseline studies and permitting efforts for the Eskay Creek mine (1989-93), regional data was collected from all major weather reporting stations including Telegraph Creek, Todagin Ranch, Bob Quinn, Forrest Kerr, Stewart, Alice Arm, Snip Project, Sulphurets Project, and Snippaker Creek.

The expected mean annual temperature at the mine site (EI. 750 m) is 1 ± 0.9 °C, with mean monthly temperatures ranging from -10.4 °C in January to +15 °C in July (EC 201b). Expected extreme temperatures range from -40 °C to +30 °C.

The estimated mean annual total precipitation at the mine site is estimated to be 2500 +/- 500 mm. Data collection at the site between 1989 and 1993 indicated between 55% and 71% of precipitation falls as snow.

Regional snowpack data is available but is highly variable and location dependent. Snowpack data collected at the Eskay Creek Project between 1990 and 1993 indicated peak snowpack (April) of 1425 \pm 567 mm. Cumulative snowfall data at the mine site collected between 1999 and 2006 indicates a range of roughly 7.5 to 17.5 m of snow fall between September and May. Although annual snowfall is high, the snow avalanche hazard for the area is low, except in the Volcano Creek region.

Although adaptations are required to manage climate conditions, the operating season at Eskay is unconstrained. The mine operated successfully between 1994 and 2008 on a year-round basis.

5.3.2 Vegetation

The Eskay Creek Project area is represented by five biogeoclimatic zones: Alpine Tundra (AT), Engelmann Spruce-Subalpine Fir (ESSF), Mountain Hemlock (MH), Coastal Western Hemlock (CWH) and Interior Cedar Hemlock (ICH) (BC Ministry of Forests, 1988).

The highest elevational zone at 1050 amsl (above mean sea level), occurring throughout the Tom MacKay Lakes area, is the Alpine Tundra Zone (AT). Here, the harsh climate results in essentially

treeless conditions. Vegetation is dominated by heather, lichens, mosses, sedges and hardy alpine flowers. Much of this area is interspersed with rock and standing water.

The mine site and mid-Tom MacKay Creek, lower Argillite Creek, and mid-upper Eskay Creek are located within the Engelmann Spruce - Subalpine Fir Zone (ESSF), which includes continuous forest cover at its lower and middle elevations and subalpine parkland near its upper limits. Englemann Spruce (*Picea Engelmann*) dominates the canopy of mature stands, while subalpine fir (*Abies lasiocarpa*) is most abundant in the understory (Meidinger and Pojar, 1991).

Subalpine areas below the Alpine Tundra are within the Mountain Hemlock Zone (MH), west and southwest of the mine site area. The major tree species include mountain hemlock (*Tsuga mertensiana*), subalpine fir with Sitka spruce and western hemlock (*Tsuga heterophylla*) occurring at lower elevations.

Low elevation landscapes along the Unuk River near the outlets of both Eskay Creek and Ketchum Creek are within the Coastal Western Hemlock Zone (CWH). Tree species include western hemlock, Sitka spruce, black cottonwood, subalpine fir and a hybrid of white and Sitka spruce known as Roche spruce.

Valley bottoms and low elevation uplands along the Iskut River and Forest Kerr Creek are situated within the Interior Cedar Hemlock Zone (ICH). Dominant shrubs and groundcover characteristic of the ICH include feathermosses and leafy mosses.

5.4 Physiography

The Eskay Creek Project lies in the Prout Plateau, a rolling subalpine upland with an average elevation of 1100 m (amsl), located on the eastern flank of the Boundary Ranges. The Plateau is characterized by northeast trending ridges with gently sloping meadows occupying valleys between the ridges (Figure 5-2). Relief over the Plateau ranges from 500 m in the Tom MacKay Lake area to over 1000 m in the Unuk River and Ketchum Creek valleys. Mountain slopes are heavily forested, and scenic features of glacial origin, such as cirques, hanging valleys and over-steepened slopes are present throughout. The Plateau is surrounded by high serrate peaks containing cirque and mountain glaciers.

The surficial geology in the area is varied. Typical features include: glacial till deposits, talus at the base of bedrock outcrops, colluvium on steep slopes, organics in poorly drained depressions and kettle holes, alluvial deposits along streams and alluvial fan deposits along the lake shorelines.

The Prout Plateau is drained by the tributaries of two major river systems including the Stikine -Iskut Rivers, and the Unuk River. Volcano Creek drains to the north into the Iskut River, a major tributary to the Stikine River system. The remainder of the Plateau is drained almost exclusively by the Unuk River and its tributaries: Tom MacKay, Argillite, Ketchum, Eskay and Coulter Creeks. The gradient of these drainages increases dramatically as they descend from the moderate relief of the Prout Plateau into the deeply incised Unuk River valley. The Plateau is occupied by Tom MacKay, Little Tom MacKay and several smaller lakes and Argillite Creek which form the headwaters of the Tom MacKay Creek drainage system.



Figure 5-2: View of Eskay Creek valley looking northeast

6 History

The Eskay Creek Property has undergone exploration activity dating back to 1932 when prospectors looking for precious metals were first attracted by the gossanous bluffs extending for over seven kilometers beside Eskay and Coulter Creeks. The Tom Mackay Syndicate undertook the first staking in 1932 near the southern end of the claim group. During the period from 1935 to 1938, Premier Gold Mining Company Ltd. held the property under option and were responsible for the definition of 30 zones of surface mineralization including the 21 Zone. This was followed in 1939 by the driving of the 85 m Mackay Adit into the hillside three kilometers south of the current 21A/B Zones by the Tom Mackay Syndicate.

During World War II, from 1940 to 1945, exploration was halted and from 1946 through to 1963 only minor work was done on the property. This work included some minor re-staking along with various changes in claim title.

Western Resources drove the Emma Adit in 1963 with drifting and crosscuts totalling 146 m. In 1964, the property was registered under Stikine Silver Limited.

Seven different options were undertaken on the property between 1964 and 1987. Exploration continued with geological mapping, geochemical and geophysical surveys, trenching and diamond drilling looking for precious metal and VMS-style targets. During this period, in 1986, the company was renamed Consolidated Stikine Silver.

In 1988, Calpine Resources Inc. signed an option agreement to earn a 50% beneficial interest in the TOK and KAY claims by spending \$900,000 over a three-year period. Six diamond drill holes were undertaken in the fall of 1988 near the old 21 Zone trenches. The 21A Zone was discovered with an intercept of 25.78 g/t Au and 38.74 g/t Ag over 29.4 m in drill hole DDH CA88-6. Continued drilling in 1988 and 1989 outlined the 21A Zone and defined the 21B Zone, some 200 meters to the north. Prime Resources acquired a controlling interest in Calpine in 1989 and took over managing the Eskay Creek project. Once their obligations were complete, Prime merged with Calpine in April 1990. At the same time, Homestake Canada Inc. acquired an equity position in Consolidated Stikine Silver and eventually acquired the property. 21B Zone underground development began in 1990-91, a feasibility study was undertaken in 1993 and the Eskay Creek Mine was officially opened in 1995.

From 1995 through 2001, Homestake Canada operated the mine and continued exploration on the surrounding claims with geological mapping, geochemical and geophysical surveys and diamond drilling.

In 2002 Barrick Gold Corp. assumed control of the Eskay Creek Mine, continuing with mining operations and exploration until the mine closure in 2008. From 2008 to 2018 the property has been under a state of reclamation, care and maintenance. Skeena entered into an option agreement with Barrick in 2017 and as of the date of this report is undertaking a Phase 1 surface diamond drill program centred upon the 21A, 21C and 22 Zones.

Table 6-1 is a summary of the work that had been undertaken on the Eskay Creek Project by various operators since 1932.

Year	Owner	Work Area	Description
1932	Unuk Gold/Unuk Valley Gold Syndicate	Unuk & Barbara Group claims (Core Property)	Prospecting
1933	Mackay Syndicate	Unuk & Barbara Claims	Trenching
1934	Mackay Syndicate/Unuk Valley Gold Syndicate	Unuk, Barbara & Verna D. Group Claims	Prospecting Diamond drilling (261.21 m)
1935-1938	Premier Gold Mining Co. Ltd.	Core Property	Optioned property and conducted prospecting Trenching Diamond drilling (1,825.95 m) Defined and named over 30 mineralised showings. Names are still in use (e.g. the 21, 22 zones, etc.)
1939	MacKay Gold Mines Ltd.	#13 O.C./Mackay Adit	Financed by Selukwe Gold Mining and Finance Company Ltd. and acquired property. Conducted data review Underground development of the MacKay Adit (84.12m)
1940-1945			No activity due to World War II
1946	Canadian Exploration Ltd.	Mackay Adit	Optioned property Mapping Trenching Underground development - extended the Mackay Adit to 109.73 m & put raise to surface at 46 m)
1947-1952	American Standard Mines Ltd. / Pioneer Gold Mines of B.C. Ltd. / New York- Alaska Gold Dredging Corp.	Canab Group (36 claims of the Mackay Group)	Optioned and conducted Property Examination.
1953	American Standard et al	Canab Group / Mackay Group 36 claims (No. 21, No. 22 & No. 5 areas)	Trenching (2655.32 m) Open cutting in the 5, 21 and 22 zones Diamond Drilling (22 boreholes)
1954-1962	Western Resources Ltd.	Kay 1-18	Unknown – no work reported
1963	Western Resources Ltd.	Kay 1-18 Kay 19-36 Emma Adit	Underground development of the Emma Adit (111.25m) Road building (13 km) from Tom Mackay Lake to property
1964	Stikine Silver Ltd. / Canex Aerial Exploration Ltd.	Kay Group Emma Adit	Optioned from Western Resources Ltd. Mapping Rock, stream, sediment, and soil sampling Underground diamond drilling (224.64m)
1965	Stikine Silver Ltd.	Kay Group (40 claims) Emma Adit	Trenching (1457.20m in 18 trenches) Diamond drilling (15.85 m) Underground development (extended Emma adit to 178.61m)
1966	Stikine Silver Ltd.		No activity

Table 6-1:	Summary	v of ex	ploration	on the	Eskav	/ Creek	Project
		,		••			

Year	Owner	Work Area	Description
1967	Mount Washington Copper Co. / Stikine Silver Ltd.	Kay 1-36 (Core Property)	EM 16 and magnetometer surveys Petrography
1968-1970	Newmont Mining Corp.	Kay 1-8 Au 1-4 Kay 3-4	Surface and underground geological mapping Trenching (137.16 m)
1971-1972	Stikine Silver Ltd.	22 Zone	Trenching Surface bulk sample (1515 kg grading 6.06 g/t Au, 4451.56 g/t Ag, 2.8% Zn, 1.9% Pb)
1973	Kalco Valley Mines Ltd.	22 Zone	Surface geological mapping Diamond drilling (299.62 m)
1974 1975-1976	Texasgulf Canada Ltd.	#5 O.C. #6 O.C. (Kay 11-18, Tok 1-22 & Sib 1-16 claims)	No activity Mapping (1:5,000, Donnelly, 1976 B.Sc. Thesis, UBC) Line cutting Rock sampling EM Mag Diamond drilling (373.38 m)
1977-1978			No activity
1979	May-Ralph Resources Ltd.	22 Zone	Hand-cobbed bulk sample (1,263 grams Au, 25,490 grams Ag, 412 kg Pb and 1,008 kg Zn – no tonnage reported)
1980-1982	Ryan Exploration Ltd. (U.S. Borax)	22 Zone #6 Zone Mackay Adit	Mapping Rock, stream sediment and soil sampling Diamond drilling (452.32 m)
1983-1984			No activity
1985	Kerrisdale Resources Ltd.	#5 Zone 21 Zone 22 Zone	Mapping Rock and soil sampling Diamond drilling (622.10 m)
1986			No activity
1987	Consolidated Stikine Silver	#3 Bluff 5, 21 and 23 Zones	Stream sediment and soil sampling Core (all Kerrisdale) sampling Trench sampling
1988	Calpine Resources Inc. / Consolidated Stikine Silver	21A/21B Zones	Mapping, Rock Sampling, Soil Sampling, Diamond Drilling (2,875.5 m) Discovery hole CA88-6 for 21A Zone
1989	Calpine Resources Inc. / Consolidated Stikine Silver	21A/21B Zones 22 Zone	Mapping Rock and soil sampling Airborne Mag/EM/VLF Ground Mag/VLF-EM, I.P. Diamond drilling (44,338.9 m) Legal surveys
1990	Calpine Resources Inc. / Consolidated Stikine Silver	21B/21C Zones Pumphouse Mack Proposed Mill Site Proposed Mine Site GNC Adrian	Mapping Rock and soil sampling UTEM Survey Diamond drilling (141,412.86 m) Environmental and terrane studies Geotechnical and metallurgical studies Underground development (21B Zone) Bulk Sample

Year	Owner	Work Area	Description
1991	International Corona Corp.	21B Zone GNC	Mapping Rock and soil sampling UTEM, seismic refraction and borehole FEM Diamond drilling (2,791 m) Relogging core program Start of underground diamond drilling
1992	International Corona Corp.	21B Zone GNC	Mapping Rock and soil sampling Seismic refraction / Gradient / I.P. / Transient EM / Borehole FEM Diamond drilling (3,342 m)
1993	Homestake Canada Inc.	21B Zone GNC	Mapping Rock sampling Resistivity/Borehole FEM Diamond drilling (1,606.6 m) Completion of Eskay mine road T. Roth - MSc. thesis completed R. Bartsch - MSc. thesis completed
1994	Homestake Canada Inc.	21B Zone Adrian Albino Lake	Mapping, Rock sampling Borehole EM Diamond drilling (4,080.95 m)
1995	Homestake Canada Inc.	21B Zone/NEX Bonzsai	Mapping Rock sampling Diamond drilling (3,468.1 m) Start of production on 21B Zone Production: 6,113 kg Au, 309,480 kg Ag
1996	Homestake Canada Inc.	21B Zone/NEX/HW Adrian Bonsai	Mapping Rock sampling Trenching Diamond drilling (21,280.8 m) Orthophoto Survey Production: 6,570 kg Au, 375,000 kg Ag
1997	Homestake Canada Inc.	21B Zone/21C/21E Adrian GNC Mack Star	Prospecting Silt Sampling Diamond Drilling (16,220.47 m) Production: 7,612 kg Au, 367,000 kg Ag
1998	Homestake Canada Inc.	21C/21A/Pumphouse 5/23/22/28/Mackay Adit GNC Mack SIB Gaps Star/Coulter	Mapping and prospecting Test gravity survey Diamond drilling (21,909.63 m) Orthophoto survey Production: 8,774 kg Au, 364,638 kg Ag
1999	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb	Mapping and prospecting Structural study Geophysical compilation Diamond drilling (17,363.96 m) Production: 9,934 kg Au, 422,627 kg Ag
2000	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb	Mapping Prospecting Diamond Drilling (25,893.93 m) Production: 10,363 kg Au, 458,408 kg

Year	Owner	Work Area	Description
2001	Homestake Canada Inc.	21C/21A/Pumphouse Deep Adrian West Limb East Limb Felsite Bluffs Sib Gaps Pillow Basalt Ridge	Mapping and prospecting Diamond drilling (22,035.48 m) Production: 9,977 kg Au, 480,685 kg Ag
2002	Barrick Gold Corp.	21C/21A/Pumphouse Deep Adrian West Limb 22 Zone Mackay Adit	Mapping and prospecting Diamond drilling (15,115.69 m) Production: 11,157 kg Au, 552,487 kg Ag T. Roth - PhD. thesis completed
2003	Barrick Gold Corp.	21C/21A/Pumphouse Deep Adrian West Limb 22 Zone Mackay Adit	Mapping and prospecting Diamond drilling (18,323.28 m) I.P. and gravity surveys Linecutting Production: 10,951 kg Au, 527,775 kg Ag
2004	Barrick Gold Corp.	22 Zone Deep Adrian West Limb Ridge Block Footwall	Mapping and prospecting Rock, soil, silt and vegetation sampling Topographic survey Borehole TEM Diamond drilling (18,404.88 m) Production: 8,825 kg Au, 504,602 kg Ag
2005	Barrick Gold Corp.		Diamond drilling (16,000 m) Production: 5,917 kg Au, 323,350 kg Ag
2006	Barrick Gold Corp.		Production: 3,324 kg Au, 216,235 kg Ag
2007	Barrick Gold Corp.		Production: 2,115 kg Au, 108,978 kg Ag
2008	Barrick Gold Corp.		Production: 480 kg Au, 27,800 kg Ag Mine Closed – April Reclamation ongoing
2009-2016	Barrick Gold Corp		Mine reclaimed Continuous care and maintenance
2017	Barrick Gold Corp. / Skeena Resources Ltd.		Continuous care and maintenance Skeena secures option
2018	Barrick Gold Corp. / Skeena Resources Ltd.		Skeena files Notice of Work, commences diamond drill program on the 21A, 21C and 22 Zones

6.1 Past Production

The Eskay Creek mine was in production from 1994 until April 2008. Homestake Canada Inc. acquired Prime Resources and developed the mine, at a nominal rate of 270 tonnes per day, with the first shipment of direct-to-smelter ore from the 21B Zone being made in January 1995. Planning for an on-site mill started almost immediately and was permitted in 1996. It began commercial production on January 1, 1998 at 150 tonnes per day; increasing incrementally over the next six years. The mill treated metallurgically simpler ore which primarily came from the 109 footwall Zone below 21B, and subsequently the NEX stratiform Zone which was discovered in 1995.

The trackless, drift-and-fill underground mine produced more than 3.3 million ounces of gold and 160 million ounces of silver from less than 2.3 million tonnes of ore during its 14 year mine life. Historical production from Eskay Creek is shown below in Table 6-2. Underground workings (stopes, lifts and development drives) are shown in Figure 6-1.

	Gold	Gold	Silver	Silver	Ore Tonnes	Ore Tonnes
Year Gold	Produced	Produced	Produced	Produced	Milled	shipped
	(oz)	(kg)	(kg)	(oz)		direct
1995	196,550	6,113	309,480	9,950,401	0	100,470
1996	211,276	6,570	375,000	12,057,000	0	102,395
1997	244,722	7,612	367,000	11,799,784	0	110,191
1998	282,088	8,774	364,638	11,723,841	55,690	91,660
1999	308,985	9,934	422,627	13,588,303	71,867	102,853
2000	333,167	10,363	458,408	14,738,734	87,527	105,150
2001	320,784	9,977	480,685	15,454,984	98,080	109,949
2002	358,718	11,157	552,487	17,763,562	116,013	116,581
2003	352,069	10,951	527,775	16,969,022	115,032	134,850
2004	283,738	8,825	504,602	16,223,964	110,000	135,000
2005	190,221	5,917	323,350	10,396,349	103,492	78,377
2006	106,880	3,324	216,235	6,952,388	123,649	18,128
2007	68,000	2,115	108,978	3,503,861	138,772	0
2008	15,430	480	27,800	893,826	31,750	0
TOTAL	3,272,628	102,112	5,039,065	162,016,018	1,051,892	1,205,604

Table 6-2: Historical gold and silver production during the mine life at Eskay Creek



7 Geological Setting and Mineralization

7.1 Regional Geology

The Iskut River region is located along the western margin of the Stikine Terrane, within the Intermontane Tectonic Belt of the Northern Cordillera (Figure 7-1). Anderson (1989) divides this area of the Stikine Terrane into four unconformity bounded, tectonostratigraphic elements. Deformed and metamorphosed sedimentary and volcanic rocks of the Paleozoic Stikine Assemblage are overlain by volcano-sedimentary arc complexes of the Stikinia Assemblage (Triassic Stuhini Group and Lower to Middle Jurassic Hazelton Group). These units are subsequently overlain by Upper Jurassic to Lower Cretaceous siliciclastic sedimentary rocks of the Stikine and Cache Creek Terranes (Table 7-1). Six distinct plutonic suites have been recognized in the area and commonly intrude all assemblages (Table 7-2).

Table 7-1: Regional stratigraphy of the Iskut River region (after Anderson, 1989 and Nelson et al.,2018)

Assemblage	Age	Rock Units
Coast Plutonic Complex	Tertiary	Post tectonic, felsic plutons
"Bowser Overlap" Assemblage (includes Bowser Lake Group)	Late Jurassic to Early Cretaceous	Deformed, siliciclastic sediments
"Stikinia" Assemblage (includes Stuhini & Hazelton Groups)	Triassic to Middle Jurassic	Deformed volcanics, intrusives and basinal sediments
Stikine Assemblage	Early Devonian to Early Permian	Highly deformed limestone and volcanics

Table 7-2: Iskut River region plutonic rock suite (After MDRU, 1992)

Suite Name	Lithologies	Age
Coast Plutonic Complex	Lamprophyres, gabbro-syenite	Tertiary (13-25 Ma)
Hyder	Monzogranite, monzonite, granodiorite	Tertiary (36-57 Ma)
Eskay Creek	Monzodiorite	Middle Jurassic (185 ± 2 Ma)
Sulphurets	Felsic intrusives/extrusives	Middle Jurassic (185.9 Ma)
Texas Creek	Calc alkaline granodiorite and quartz monzodiorite commonly cut by andesite dikes	Early Jurassic (189-195 Ma)
Stikine	Clinopyroxene-gabbro, diorite, monzodiorite and monzonite. Co-spatial with the Stuhini volcanics	Late Triassic (210 Ma)

Lower greenschist facies metamorphism is common throughout the area and is likely related to the Cretaceous deformation that formed the Skeena fold and thrust belt (Rubin et al., 1990; Evenchick, 1991). Deformation in the Iskut River area is characterized by regional upright anticlinoria and synclinoria, related thrust faults, mesoscopic folds and normal faults, and cleavage development.



The Iskut River region hosts many significant porphyry, precious-metal vein and volcanogenic massive sulphide deposits, the majority of which exhibit a close spatial relationship to Hazelton Group rocks (latest Triassic to Middle Jurassic) and their associated intrusions (Macdonald et al., 1996; Nelson et al., 2018). A list of some of the most significant mineral deposits and past producing mines located in the region is summarized below in Table 7-3. This information was compiled from technical reports (available on www.sedar.com) and from British Columbia's Ministry of Energy, Mines & Petroleum Resources MINFILE database.

Deposit Name	Company	Deposit Type	Status	Age
Brucejack	Pretium Resources Inc.	Porphyry-Related/ Intermediate Sulphidation Au-Ag Epithermal	In Production	Lower Jurassic (183 - 191 Ma)
KSM	Seabridge Gold Inc.	Porphyry Gold- Copper	Development Project	Lower Jurassic (190 - 198 Ma)
Red Mountain	IDM Mining Ltd.	Intrusion-Related Polymetallic Veins and Replacements	Development Project	Lower Jurassic
Snip	Skeena Resources Ltd.	Mesothermal Gold	Development Project; Past Producer (1.03 Moz Au)	Lower Jurassic (195 Ma)
Eskay Creek	Barrick Gold Inc.	VMS	Past Producer (3.30 Moz Au and 160 Moz Ag)	Lower Jurassic (175 Ma)
Granduc	Castle Resources Inc.	VMS	Past Producer (64 koz Au, 3.99 Moz Ag and 419 M lbs Cu)	Lower Jurassic
Johnny Mountain	Seabridge Gold Inc.	Mesothermal Gold	Past Producer (90,352 oz Au)	Lower Jurassic
Silbak Premier	Ascot Resources Ltd.	Intrusion-Related Polymetallic Veins/Epithermal	Past Producer (1.94 Moz Au, 41.52 Moz Ag, 54 M lbs Pb)	Lower Jurassic (194.8 Ma)

 Table 7-3: Notable mineral deposits located in the Iskut River region

Given the important relationship of the Hazelton Group to mineral deposits throughout the area, there have been many local mapping campaigns through the years, completed by different workers and at different scales. The resulting stratigraphic framework, although detailed in parts, contained numerous inconsistencies, and resulted in a poor ability to correlate stratigraphy and units on a regional scale. Working to resolve many of these issues, Nelson et al. (2018) completed a comprehensive regional investigation of the Hazelton Group, resulting in a new stratigraphic framework that contains six formations, detailed in Table 7-4.

Table 7-4: Stratigraphic framework for the Hazelton Group in the Eskay Creek-Harrymel Creek area (after Nelson et al., 2018)

Formation	Lithologies	Sub-units	Age		
Quock Fm. (Hazelton Group)	The highest unit in the Hazelton Group, consisting of 50-100 m of thinly bedded, dark grey siliceous argillite with pale felsic tuff laminae, and radiolarian chert. Commonly identifiable by presence of alternating dark and light coloured beds. Located in areas proximal to, but outside of the Eskay rift.				
Mt. Dilworth Fm. (Hazelton Group)	Dacite and rhyolite that form laterally continuous exposures; distinguished from felsic units of the Iskut River Fm. by its regional extent and lack of interfingering with mafic units. Located in areas proximal to, but outside of the Eskay rift.				
		Willow Ridge mafic unit - Voluminous basalts located at varying stratigraphic levels; present in the hanging wall to the Eskay Creek deposit.	170-173 Ma		
Iskut River Fm.	A several kilometre thick succession of interlayered basalt, rhyolite, and sedimentary rocks that occupy a narrow, fault-bounded north-trending belt known as the Eskay Rift. It	Mount Madge sedimentary unit - Thinly bedded black argillaceous mudstone and felsic tuff (host to the stratiform mineralization at Eskay Creek in the Contact Mudstone); similar thin, discontinuous lenses enclosed within volcanics occur elsewhere in the Iskut River Fm.	171-175 Ma		
(Hazelton Group)	consists of a highly variable succession of mafic and felsic volcanic and sedimentary units in differing stratigraphic sequences, often with multiple stratigraphic repetitions	Eskay Rhyolite Member - A linear flow dome complex of coherent to brecciated flows that show peperitic contacts with the overlying argillites; distinct geochemical signature compared to other felsic bodies in the area (AI/Ti>100). Associated with the mineralizing event at Eskay Creek.	175 Ma		
		Bruce Glacier felsic unit - Non-welded to welded lapilli tuff, felsic volcanic breccia and coherent flows, and volcanic conglomerates. Located in the footwall of the Eskay Creek deposit.	173-179 Ma		
Spatsizi Fm. (Hazelton Group)	Volcanic sandstone, conglomerate, and limestone.	local bioclastic sandy limestone, mudstone-siltstone rhythmites, and	~174-187 Ma		
Betty Creek Fm.	Can be subdivided into three informal units which have been observed as	Brucejack Lake felsic unit - Flow dome complex believed to represent the extrusive and high-level intrusive products of a local magmatic centre; consists of k-spar, plagioclase and hornblende phyric flows, breccias and bedded welded to non-welded felsic tuffs that are intruded by flow-banded coherent plagioclase phyric bodies (grade upward into flows).	183-188 Ma		
(Hazelton Group)	multiple bodies at different stratigraphic levels.	Johnny Mountain dacite unit - Generally located upsection of the Unuk River andesite consisting of bedded dacite lapilli tuff and breccia.	~194 Ma		
		Unuk River andesite unit - Pyroclastic and epiclastic deposits often located unconformably overtop of the Jack Fm.	187-197 Ma		
Jack Fm. (Hazelton Group)	Basal siliciclastic unit characterized by c sandstone, greywackes, and thinly bedo colour. Some sections contain interbed	cobble-boulder granitoid-clast conglomerates, quartz-bearing arkosic led siltstones and mudstones, units sometimes weather to an orange ded andesitic volcaniclastics.	196-203 Ma		

7.2 Property Geology

7.2.1 Stratigraphy

The Eskay Creek deposit is located near the northern margin of the Eskay Anticline, just below the stratigraphic transition from volcanic rocks of the uppermost Hazelton Group to marine sediments of the Bowser Lake Group (Figure 7-2 and Figure 7-3). Descriptions of units from the local mine stratigraphy have been compiled from Roth et al. (1999) with stratigraphic nomenclature taken from Nelson et al. (2018).

The lowest stratigraphic unit encountered at Eskay Creek is the Unuk River andesite unit (Betty Creek Formation), which is exposed in the core of the Eskay Anticline. It is characterized by a thick sequence of coarse, monolithic andesite breccias and heterolithic volcaniclastic rocks. The andesites are overlain by marine shales and interbedded coarse clastic sedimentary, volcaniclastic, and calcareous rocks of the Spatsizi Formation. Bartsch (1993) suggests that the observed shift from sandstone and conglomerate to shale dominated facies indicates a shift from shallow to deeper marine settings.

The base of the Iskut River Formation is marked by a sequence of volcaniclastic rocks with compositions ranging from dacite to basalt and are likely part of the Bruce Glacier felsic unit. This unit is characterized by pumice-rich block and lapilli tuffs and heterogeneous epiclastic rocks that are locally fossiliferous. Near the top of the sequence, a distinct dacite amygdaloidal, aphanitic flow or sill forms a marker horizon referred to by Roth et al. (1999) as the Datum Dacite. This unit is capped by a thin (<3 m thick) distinctive black mudstone horizon, referred to as the Datum Mudstone.

Up stratigraphy, the Eskay Rhyolite member is represented by a linear set of flow-dome complexes through the property. Locally preserved flow bands, flow lobes, breccias, hyaloclastite, spherulites, and perlitic textures allowed Bartsch (1993) to identify several distinct facies. These included basal and peripheral fragmental felsic rocks containing pumiceous clasts, outer zones dominated by chaotic autobrecciated flow-banded rhyolite, and central zones of massive to flow-banded rhyolite. The entire rhyolite sequence is up to 200 m thick. U-Pb zircon dating by Childe (1996) shows an age for the unit of 175 ± 2 Ma. The Eskay Rhyolite Member is located in the immediate footwall to the economically significant stratiform mineralized bodies, and also hosts stringer-style discordant mineralization.

The contact between the rhyolite and overlying Contact Mudstone (Mount Madge Sedimentary unit) is locally marked by a black-matrix breccia, consisting of matrix-supported white rhyolite fragments set in a siliceous black matrix (Bartsch, 1993). Peperitic textures, represented by irregular concave surfaces and jigsaw texture of the rhyolite fragments, suggests in-situ fragmentation of rhyolites as they intruded wet sediments. This hints that rhyolite volcanism was at least partly synchronous with argillaceous sedimentation. Overlying the rhyolite and black matrix breccia are black mudstone and intercalated graded volcaniclastic sedimentary rocks (Roth et al., 1999). Rhyolite fragments contained within the volcaniclastic beds suggest an extrusive component to the rhyolite flow domes (Roth, 1995). Within these volcaniclastic intervals, the presence of coarser rhyolite breccia fragments is interpreted to represent debris flows. The thickest accumulations of these rhyolitic

fragments are located in the immediate footwall to the 21B clastic ore Zone, which suggests that a basin developed in the area prior to mineralization (Roth, 1995).



Figure 7-2: Eskay Creek stratigraphic section (modified after Gale et al., 2004)



The Contact Mudstone (Mount Madge sedimentary unit) at Eskay Creek lies above the Eskay Rhyolite Member and below the Willow Ridge basalt unit. The Contact Mudstone is the host unit for stratiform mineralization in the 21A, B, C, E, NEX and Hanging Wall Zones. It is characterized by laterally extensive, well-laminated, carbonaceous mudstone that is variably calcareous and siliceous and ranges from less than 1 m to more than 60 m in thickness. Thin siltstone, sandstone and ash beds, and pyritic laminae are common through the unit. Within certain beds, radiating porphyroblasts of prehnite, variably altered to sericite, calcite, and barite have been noted (Ettlinger, 1992). They may be a result of contact metamorphism due to the emplacement of basaltic dikes and sills.

The uppermost unit of the Iskut River Formation at Eskay Creek is the hangingwall basalt (Willow Ridge mafic unit). The basalt occurs as both extrusive and intrusive phases, ranges from aphanitic to medium-grained with local feldspar phenocrysts, and in places exceeds 150 m thickness. Near the top of the sequence, well-preserved pillow flows and breccias, hyaloclastite, and basaltic debris flows containing minor mudstone and rhyolite clasts interspersed with thin argillite beds have been reported (Roth et al., 1999). Basalt flows near the top of the sequence commonly contain chlorite and quartz-filled amygdules.

Capping the entire sequence are thick accumulations of Bowser Lake Group mudstones and conglomerates, covered locally by a thin veneer of in-situ soils and transported tills.

7.2.2 Intrusive Rocks

Intrusive units are common through the stratigraphic sequence. The 184 +5/-1 Ma (MacDonald et al., 1992; Childe, 1996) Eskay monzodiorite porphyry is perhaps the most voluminous intrusive on the property and is exposed in the core of the Eskay Anticline just south of the 21 Zone deposits. It predates the Eskay Rhyolite and mineralization located in the 21 Zone deposits, by 6-16 million years.

On the West Limb of the Eskay Anticline, a series of north-northeast trending felsic intrusive rocks form a series of prominent gossanous bluffs which extend for 7 km to the southwest of the Eskay Creek deposit. These felsic intrusives are chemically indistinguishable from the Eskay Rhyolite (Bartsch, 1993, Roth, 1993) and display strong quartz, pyrite, and potassium feldspar alteration with minor sericite. Bartsch (1993) and Edmunds et al. (1994) believe these intrusives represent sub-volcanic portions, or feeders, to the Eskay Rhyolite.

Basaltic dikes and sills linked to the hangingwall basalt (Willow Ridge mafic unit) are also observed throughout the Eskay Creek stratigraphic section. Where they cut the Contact Mudstone, their contacts are frequently brecciated and peperitic, suggesting the mudstone was still wet at the time of intrusion (Roth et al., 1999).

7.2.3 Structure

The Eskay Creek deposit area has been deformed by at least two tectonic events (Edmunds and Kuran, 1992). The earliest deformation (D1) is likely related to a mid-Cretaceous north-northwest compression event that formed the northeast trending, syncline-anticline couples and a spaced pressure solution cleavage. The cleavage is axial planar to the bedding-defined Eskay Creek

Anticline and is pervasive within the phyllosilicate-rich lithologies and even through the massive sulphide horizons. Faulting late in the D1 event resulted in the development of east-dipping thrust sheets, such as the Coulter Creek Fault, south of Eskay Creek. Regional metamorphism during the D1 event also resulted in the formation of porphyroblastic prehnite and calcite.

A second deformation (D2) event, related to a north-northeast directed compression event, locally re-oriented the D1 cleavage planes and formed prominent north and northeast trending, steeply dipping faults. Crosscutting relationships suggest that the north set of faults are early with apparently consistent sinistral displacement (Edmunds and Kuran, 1992). The later northeast trending set of faults commonly display oblique normal displacement. These faults form strong topographic lineaments and displace both stratigraphic contacts and mineralized zones.

7.2.4 Alteration

Alteration in the footwall volcanic units is characterized by a combination of pervasive quartzsericite-pyrite, potassium feldspar, chlorite and silica. Zones of most intense alteration are associated locally with sulphide veins that contain pyrite, sphalerite, galena, and chalcopyrite (Roth et al., 1999).

Alteration zonation is perhaps most apparent in the Eskay Rhyolite member (Roth et al., 1999), closely associated with the 21 Zone deposits. Rhyolite located lateral to and at deeper levels beneath the area of stratiform mineralization is commonly moderately silicified and potassium feldspar altered. Silica alteration occurs as extremely fine-grained quartz flooding and densely developed quartz-filled micro veinlets. Potassium feldspar occurs cryptically as fine-grained replacement of plagioclase phenocrysts (Gale et al., 2004). Fractures that cut potassium feldspar-silica altered rhyolite typically have sericitic alteration envelopes and contain very fine-grained pyrite. Where alteration is most intense, chlorite replaces sericite in these fracture envelopes.

An intense tabular shaped blanket of chlorite-sericite alteration, up to 20 m thick, occurs in the Eskay Rhyolite member, immediately below the contact with the main stratiform sulphide mineralization. In these areas, Mg-chlorite has completely replaced the rhyolite to form a dark green, waxy rock consisting of clinochlore (Roth et al., 1999). This blanket coincides spatially with an area of greater rhyolite thickness and where extensive brecciation has developed in the upper part of the rhyolite unit. This zone of increased brecciation likely created more pathways for hydrothermal fluids, and therefore greater surface area for fluid-rock interaction, resulting in development of the stronger alteration zone.

7.2.5 Mineralization

Several distinct styles of stratiform and discordant mineralization are present at the Eskay Creek Project, defined over an area approximately 1,400 m long and up to 300 m wide (Figure 7-4). Early exploration efforts focused on discordant style, precious metal mineralization hosted in sulphide veins within the rhyolite, felsic intrusions, and the footwall volcanic units. Following recognition of more significant stratiform mineralization, exploration expanded further to the north, defining the 21 Zone deposits. Distinct zones have been defined by variations in location, mineralogy, texture, and precious metal grades (Edmunds et al, 1994).

The main characteristics and stratigraphic locations of the ore zones are well summarized by Roth et al. (1999), shown in Table 7-5.



Table 7-5: Summary of mineralized zones at Eskay Creek (after Roth et al., 1999)

Zone	Associated Elements	Characteristics	Stratigraphic Position
		Stratiform lenses of massive to semi-massive sulphides (realgar, stibnite, cinnabar, arsenopyrite).	At the base of the Contact Mudstone
21A	As-Sb-Hg-Au-Ag	Disseminated stibnite, arsenopyrite, tetrahedrite, and veinlets of pyrite, sphalerite, galena, tetrahedrite ± chalcopyrite.	Hosted within the underlying rhyolite
21B	Au-Ag-Zn-Pb-Cu-Sb	Stratiform, bedded clastic sulphides and sulfosalts including: sphalerite, tetrahedrite-freibergite, Pb sulfosalts (including boulangerite, bournonite, jamesonite), stibnite, galena, pyrite, electrum, and amalgam.	At the base of the Contact Mudstone
21C	Ba (Pb-Zn-Au-Ag)	Bedded massive to bladed barite associated with very fine-grained disseminated sulphides including pyrite, tetrahedrite, sphalerite and galena. Located sub-parallel to and down-dip of the 21B zone.	Within the Contact Mudstone
		Localized zones of cryptic, disseminated, precious metal bearing mineralization.	Hosted within the underlying rhyolite
21E	Ag-Au-Zn-Pb-Cu	Fine-grained massive to locally clastic sulphides and sulfosalts. Massive pyrite flooding in rhyolite grading upwards into massive sulphides and sulfosalts.	Within a fault bounded block, mainly at the contact between mudstone and rhyolite
NEX	Au-Ag-Zn-Pb-Cu	The North Extension Zone (NEX) stratiform mineralization is similar to the 21E, and locally the 21B zone. Contains fewer sulfosalts and has a local overprint of chalcopyrite stringers.	At the base of the Contact Mudstone
Hanging Wall (HW)	Pb-Zn-Cu	Massive, fine-grained stratabound sulphide lens dominated by: pyrite, sphalerite, galena, and chalcopyrite (mainly as stringers). This zone has generally lower gold-silver grades and higher base metals relative to the 21 zones.	Within the Contact Mudstone but at a higher stratigraphic level than the 21 zone deposits
Pumphouse	Fe-Zn-Pb-Cu	Veins of pyrite, sphalerite, galena, and tetrahedrite. Commonly banded; locally with colloform textures. Local zones of very fine- grained mineralization in rhyolite.	Discordant, within the rhyolite; spatially underlying the 21B zone
109	Au-Zn-Pb-Fe	Veins of quartz, sphalerite, galena, pyrite, and visible gold associated with silica flooding and fine-grained amorphous carbon. Underlies the north end of the 21B and HW zones.	Discordant, within the rhyolite

Stratiform style mineralization is hosted in black carbonaceous mudstone and sericitic tuffaceous mudstone of the Contact Mudstone (Iskut River Formation), located between the footwall Eskay Rhyolite member and the hangingwall Willow Ridge mafic unit. The stratiform hosted zones include the 21B Zone, the NEX Zone, the 21A Zone (characterized by As-Sb-Hg sulphides), the barite-rich 21C-Mud Zone, and the 21E Zone. Stratigraphically above the 21B Zone and usually above the first basaltic sill, the mudstones also host a localized body of base metal-rich, relatively precious metal-poor, massive sulphides referred to as the Hanging Wall or HW Zone.

Descriptions of the following stratiform mineralized zones are modified after Roth et al. (1999).

21A Zone

The 21A Zone is an Au-Ag-rich sulphide lens that sits on the flank of a small depression at the Eskay Rhyolite-mudstone contact, located 200 m south of the 21B Zone. Stratiform style, mudstone hosted mineralization averages 10 m thickness and is bound to the east by the Pumphouse fault. It is underlain by a discontinuous zone of intense Mg chlorite alteration and stockwork veining in the Eskay Rhyolite.

The sulphide lens consists of semi-massive to massive stibnite-realgar \pm cinnabar \pm arsenopyrite and local angular mudstone fragments. Disseminated stibnite, arsenopyrite, and tetrahedrite also occur in the immediate footwall of the sulphide lens within the intensely sericitized rhyolite. Cinnabar is found in late fractures that cut the sulphide lens, the surrounding mudstone, and locally, the rhyolite. Realgar-calcite veinlets locally cut the mudstone in a restricted area adjacent to the sulphide lens.

21B Zone

The main body of mineralization, the 21B Zone, is a stratiform tabular body of Au-Ag-rich mineralization roughly 900 m long, 60 to 200 m wide, and locally exceeding 20 m thick. Individual clastic sulphide beds range from 1 – 100 cm thick and become progressively thinner up sequence (Figure 7-5). Ore is composed of beds of clastic sulphides and sulfosalts containing variable amounts of barite, rhyolite, and mudstone clasts. Imbricated, laminated mudstone rip-up clasts have been observed locally at the base of the clastic sulphide-sulfosalt beds, indicating turbiditic emplacement of some beds. In the thickest part of the ore body, pebble to cobble-sized clasts occur in a northward trending channel overlying the Eskay Rhyolite. The beds grade laterally over short distances into thinner, finer-grained, clastic beds and laminations.

Gold and silver occur as electrum and amalgam while silver mainly occurs within sulfosalts. Precious metal grades generally decrease proportionally with the decrease in total sulphides and sulfosalts. Clastic sulphide beds contain fragments of coarse-grained sphalerite, tetrahedrite, Pb-sulfosalts with lesser freibergite, galena, pyrite, electrum, amalgam, and minor arsenopyrite. Stibnite occurs locally in late veins, as a replacement of clastic sulphides, and appears to be confined to the central, thickest part of the deposit, suggesting a locus for late hydrothermal activity. Cinnabar is rare and is found associated with the most abundant accumulations of stibnite. Barite occurs as isolated clasts, in the matrix of bedded sulphides and sulfosalts, and also as rare clastic

or massive accumulations of limited extent. Barite is more common towards the north end of the deposit.



Figure 7-5: 21B Zone – Tetrahedrite-sphalerite-galena-stibnite beds within the Contact Mudstone (Gale et al., 2004)

21C Zone

The 21C Zone is dominantly characterized by stratabound to stratiform barite-rich mineralization with associated disseminated base and precious metal-rich mineralization in the rhyolite footwall. It occurs at the same stratigraphic horizon as the 21B Zone but is located down-dip and subparallel to it. The two Zones are separated by a barren interval of Contact Mudstone. Mineralization is associated with mottled barite-calcite ± tetrahedrite beds in and near the base of the contact mudstone. Precious metal grades are variable. Local areas of brecciation are infilled with sulphides including sphalerite, pyrite, galena, and tetrahedrite. Mineralization in the underlying footwall forms a cryptic, tabular body, sub concordant to stratigraphy. Aside from containing 1-2% very fine-grained pyrite and trace sphalerite, tetrahedrite, and galena, the rhyolite looks similar to adjacent unmineralized areas. Drill holes have intersected intervals containing up to 35 g/t Au from these seemingly barren rhyolites.

21E Zone

Precious-metal mineralization near the north end of the 21B Zone extends over top of the anticline into a block bound by segments of the north-south oriented Pumphouse faults. Mineralization of the 21E zone is found within a steeply dipping, fault bounded slab of mudstone that is complexly folded and faulted.

While some of the mineralization appears similar to the 21B Zone, the majority is found to be steeply dipping and dominated by fine-grained, massive sulfosalts that grade downward into massive pyrite. There is a direct correlation of sulfosalts with higher-grade precious metal concentrations. The Ag/Au ratio for the zone is approximately 100 times greater than in the 21B Zone. Stringers of chalcopyrite and chalcopyrite-galena-sphalerite overprint the mineralization. Fine-grained pyrargyrite occurs locally in hairline fractures cutting the mudstone and hosts ore-grade mineralization. Many of the textures observed in this zone suggest that the sulphides were introduced by replacement processes, perhaps along early faults.

NEX Zone

The ~300 m long North Extension Zone (NEX) is geometrically complicated by numerous faults that cut the nose of the Eskay Anticline. Textures, mineralogy, and precious-metal grades are somewhat variable and show similar characteristics to parts of the 21E Zone and distal parts of the 21B Zone, suggesting synchronous deposition. Pyrite and chalcopyrite are more common whereas Sb-Hg bearing minerals are less common (Figure 7-6). Chalcopyrite occurs in stringers that overprint earlier clastic mineralization and may be related to the formation of the HW Zone. Much of the contained pyrite may also have been introduced during this later event.



Figure 7-6: NEX Zone - Massive sulphides containing local chalcopyrite within the Contact Mudstone (Gale et al., 2004)

7.2.7 Discordant Style Mineralization

Stockwork and discordant style mineralization at Eskay Creek are hosted in the rhyolite footwall within the Pumphouse, 109, 21A-Rhyolite, 21C-Rhyolite and 22 Zones. The Pumphouse Zone is characterized by pyrite, sphalerite, galena, and chalcopyrite-rich veins and veinlets hosted in strongly sericitized and chloritized rhyolite. The 109 Zone comprises gold-rich quartz veins with sphalerite, galena, pyrite, and chalcopyrite associated with abundant carbonaceous material hosted mainly in siliceous rhyolite. The 21A and 21C-Rhyolite Zones consist of very fine-grained cryptic pyrite with rare sphalerite and galena in sericitized rhyolite. The 22 Zone consists of cross-cutting arsenopyrite, stibnite and tetrahedrite veins hosted in massive to pyroclastic facies rhyolite.

Descriptions of the following discordant mineralized zones are modified after Roth et al. (1999).

HW Zone

The HW Zone forms a second massive sulphide horizon hosted in the Contact Mudstone, but at a stratigraphic level above the 21B Zone. Its geometry is disrupted by fault structures associated with the fold closure. Sulphides are typically fine-grained, finely banded, and consist of semi-massive to massive pyrite, sphalerite, galena, chalcopyrite, and tetrahedrite (Figure 7-7). Sphalerite is reddish brown, suggesting a higher iron content compared to sphalerite encountered in other Zones. The HW Zone has a higher base metal content compared to other Zones, except where tetrahedrite ± sulfosalts are observed, which are associated with significantly higher precious metal grades.



Figure 7-7: HW Zone – Massive strata-bound sulphide lenses within the hanging wall mudstone (Gale et al., 2004)

Pumphouse Zone

The Pumphouse Zone is a discordant zone of diffuse vein and disseminated sulphide mineralization hosted in the rhyolite unit beneath the 21B Zone. Precious metal grades are generally lower than in other zones. Patchy sulphide mineralization is observed locally through the rhyolite in the form of veins containing pyrite, sphalerite, galena and lesser sulfosalts such as tetrahedrite. Chalcopyrite content increases with depth. Sphalerite is generally darker (more iron-rich) than in the overlying 21B Zone. Locally, areas of very fine-grained disseminated sulphide mineralization enriched in precious metals occur; these are similar to footwall hosted mineralization observed beneath the 21C Zone.

109 Zone

The 109 Zone is named after the discovery drill hole of the same name, which intersected 99 g/t Au and 29 g/t Ag over 61 m (Edmunds et al., 1994). The Zone is characterized by a distinct siliceous stockwork of crustiform quartz veins with coarse-grained sphalerite, galena, minor pyrite, and chalcopyrite (Figure 7-8). The 109 Zone is hosted entirely within the Eskay Rhyolite, beneath the north end of the 21B and the HW Zones. Gold and silver occur in electrum and sulfosalts.



Figure 7-8: 109 Zone - Stockwork veins of quartz-sphalerite-galena-pyrite-gold in the Eskay Rhyolite (Gale et al., 2004).

8 Deposit Types

The Eskay Creek deposit is known as an outstanding example of a high-grade, precious metal rich epithermal volcanogenic massive sulphide (VMS) deposit that formed in a shallow submarine setting. The deposit has features and characteristics typical of a classic VMS deposit: it formed on the seafloor in an active volcanic environment with a rhyolite footwall and basalt hanging wall, and has chlorite-sericite alteration in the footwall and sulphide formation within a mudstone unit at the seafloor interface. What differentiates the Eskay Creek deposit from other VMS deposits are the high concentrations of gold and silver, and an associated suite of antimony, mercury and arsenic. These mineralization features, along with the high incidence of clastic sulphides and sulfosalts, are more typical of an epithermal environment with low formation temperatures.

The processes responsible for the formation of the Eskay Creek deposit are not unique in the VMS environment, but require the coincidence of several favourable conditions to optimize the precious metal grade in the deposit. Roth et al., (1999) hypothesized that the maintenance of a low temperature environment was of primary importance for the active and continued transport of gold. Heat was continually removed at the vent site due to the collapse and dismemberment of chimneys and mounds; an outcome which would have prevented the hydrothermal system from sealing. The redeposition of clastic sulphides adjacent to the vent site would have prevented the system from increasing in temperature beyond the range permissible for gold deposition. The mineralization at Eskay Creek therefore requires a specialized genetic model as shown below in Figure 8-1.



Figure 8-1: Genetic model for the development of the 21 Zone orebodies (Roth et al., 1999)

- a) Rifting, basin development and intrusion and extrusion of rhyolite flow domes. Coarse volcaniclastic debris from extrusive portions of the rhyolite domes are deposited along the developing 21B Zone trough.
- b) Hydrothermal activity is focused through rift faults forming chimneys and mounds on the seafloor. Collapse or disruption of these mounds forms clastic sulphide-sulfosalt debris which is redeposited in the 21B Zone trough. Other smaller basins provide the sites for similar mineralization and barite-rich zones (21C) related to white smokers.
- c) The HW zone of massive sulphide forms higher in the mudstone stratigraphy and basaltic magmatism begins (dykes and flows) during the waning stages of hydrothermal activity.

9 Exploration

No geochemical, geophysical or geological exploration work has been carried out on the property to date by Skeena. The most recent exploration work was completed by the historical operators in 2004, the details of which are summarized in Section 6 of this Technical report.

10 Drilling

Surface drilling has been carried out by multiple operators, with the first drilling on the property by Unuk Gold in 1932. Since that time, 1,561 diamond drill holes totalling 384,539 m have been drilled from surface. Table 10-1 summarizes the historical surface drilling on the Eskay Creek Project arranged by Operator and year (Gale, 2004); Figure 10-1 shows the location of the surface exploration holes.

Underground drilling began in 1991 and continued into 2008 to aid with ore delineation. A total of 6,061 underground drill holes were drilled totalling 309,213 m. Figure 10-2 shows the locations of the underground diamond drill holes.

Table 10-1: Summary of drilling on the Eskay Creek Project

Period of Work	Company	Area of Work	Number of Holes	DDH	Meters Drilled	
1932- 1934	Unuk Gold/Unuk Valley Gold		11	Unuk 1-11	261.21	
1935- 1938	Premier Gold Mining Co. Ltd.		38	P 12-49	1,825.95	
1964	Stikine Silver Ltd. / Canex Aerial Exploration Ltd.	Emma Adit	6	C-1 to C-6	224.64	
1965	Stikine Silver Ltd.	Emma Adit	3	?	15.85	
1973	Kalco Valley Mines Ltd.	22 Zone	7	KV-1 to KV-7	299.62	
1975- 1976	Texasgulf Canada Ltd.	#5 O.C./#6 O.C.	7	K76-1 to K76-7	373.38	
1980- 1982	Ryan Exploration Ltd. (U.S. Borax)	22 Zone/6 Zone	7	MR-1 to MR-7	452.32	
1985	Kerrisdale Resources Ltd.		5	KDL 85-1 to 85-5	622.1	
1988	Calpine Resources Inc. / Consolidated Stikine Silver	21A/21B	16	CA88-01 to CA88-16	2,875.50	
1989	Calpine Resources Inc. / Consolidated	21A/21B/22 Zone	179	CA 89-17 to CA 89-196 CA 89-198 to CA 89-205	43,017.90	
	Stikine Silver		7	CA 8922-01 to CA 8922-07	1,321.00	
		21B/21C	513	CA 90-197		
		Pumphouse		CA 90-206 to CA 90-691		
	Calpine	Mack		MK 90-01 to MK 90-04	115,272.26	
1990	Resources Inc.			PMS 90-01 to PMS 90-06		
	/ Consolidated			KP-1 to KP-16		
	Outure Onver	Proposed Mill Site	3	CA 90-692, 693, 696	1,036.60	
		GNC	19	GNC 90-01 to GNC 90-19	3,318.00	
		Adrian	35	AD 90-01 to AD 90-35	21,786.00	
1991	International	21B	12	C 91-700 to C 91-711	2,791.00	
	Corona Corp.	GNC	5	GNC 91-20 to GNC 91-24	_,	
1992	International	21B	1	C 92-712	3.342.00	
	Corona Corp.	GNC	7	GNC 92-25 to GNC 92-31	0,0+2.00	
1993	Homestake	21B	2	C 93-713- to C 93-714	1,606.60	
	Canada Inc.	GNC	3	GNC 93-32 to GNC 93-34	.,	
1994	Homestake	Adrian	6	AD 94-35 to AD 94-40	3,531.70	
1004	Canada Inc.	21B	5	KP 94-1 to KP 94-5	549.25	

Period of Work	Company	Area of Work	Number of Holes	DDH	Meters Drilled
1995	Homestake Canada Inc.	21B/NEX/	21	C 95-715 to C 95-735	3,468.10
				(formerly labelled NEX 95-1 to 18 and QZ 95-1 to 3)	
		Bonzai	5	BZ 95-1 to BZ 95-5	
1996	Homestake Canada Inc.	21B/NEX/HW	94	C 96-736 to C 96-829	21,280.80
		Adrian	19	AD 96-41 to AD 96-59	
		Bonsai	1	BZ 96-06	
1997	Homestake Canada Inc.	21B/21C/21E	42	C 97-830 to C 97-871	16,220.47
		Adrian	14	AD 97-60 to AD 97-73	
		GNC	1	GNC 97-30X	
		Mack/Star	2	MP 97-01 to MP 97-02	
1998	Homestake Canada Inc.	Core Property GNC Mack	79	C 98-872 to C 98-950	21,909.63
			2	GNC 98-35 to GNC 98-36	
			8	MP 98-03 to MP 98-09	
			1	SP 98-01	
1999	Homestake Canada Inc.	Core Property	64	C 99-951 to C 99-1014	17,363.96
2000	Homestake Canada Inc.	Core Property	77	C001012W C001015 to C001088	25,893.93
2001	Homestake Canada Inc.	22 Zone 21C	61	C011089 to C011145	22,035.48
2002	Barrick Gold Corp.	21C Zone 21A Zone Deep Adrian	47	C02-1146 to C02-1178 C02-920X, C02-975X	15,115.69
2003	Barrick Gold Corp.	22 Zone 21A Zone 21C Zone	71	C03-1179 to C03-1245 C03-919X	18,323.28
2004	Barrick Gold Corp.	22 Zone Ridge Block 21C/21E Deep Adrian	55	C04-1261 to C04-1298	18,404.88
				C04-1020X, C04-1196X	
				C04-1206X	
				5702, 6461, 6464	




10.1 Surface Drilling

Limited details are available regarding drilling contractors and drilling procedures specific to each campaign prior to 1995.

1995-1997

Most of the drilling around the mine workings was completed by Hy-Tech Drilling of Smithers, B.C. Hy-Tech Drilling utilized up to three drill rigs that included a JKS-300 which drilled BQTK (thin wall) core, and two F-15 drill rigs which drilled NQTK (thin wall in 1996) and NQ2 in 1997.

In 1996, Advanced Drilling of Vancouver completed 4 holes using a Boyles 56 drill rig.

No casing for the 1995 program survived the winter snow removal since they were all located near, or on, the mine access road. Casing was left in most of the holes from 1996 and 1997. All holes were grouted provided that the casing was still intact. All holes drilled in 1996 and 1997 were marked with a yellow wooden stake and aluminum tags marked with the drill hole number.

1998

Hy-Tech Drilling of Smithers, B.C. completed all holes of the 1998 campaign using four drill rigs including two JKS-300 rigs which drilled BQTK (thin wall) core and two F-15 rigs which drilled NQ2 core (with the capability of reducing to BQTK or BQ).

None of the holes completed during the 1998 drilling campaign were grouted. This was due partially to the ineffectiveness of the material used during the 1997 campaign and also the initiation of the mine closure plan.

2004

Hy-Tech Drilling of Smithers, B.C. completed all drill holes during the 2004 summer and winter drilling campaigns. Three drill rigs were utilized including one JKS-300 rig which drilled both BQTK (thin wall) core and NQ2, and two modified F-15 rigs, which drilled NQ2 core (with the capability of reducing to BQTK or BQ).

All of the drill holes were sealed using Volclay grout and a 15 m cement cap at the overburden/bedrock interface. The casings were left in for holes C04-1248 to C04-1272, but removed for all other holes and plugged with a yellow or orange steel cap with the appropriate drill hole number marked on the surface. In the longer holes (i.e. Deep Adrian and Deep West Limb), an additional 15 m cement plug was placed in the HW Andesite unit, immediately below the Bowser Fault.

10.1.1 Site Reclamation

Upon completion of the drill holes, all man-made materials and set-up timbers were removed from the drill sites and all trees felled were cut into 1.3 to 2 m lengths. Before and after pictures were taken at each site and then submitted to the BC provincial government as part of the Notice of Closure.

10.2 Underground Drilling

Underground drilling began in 1991. Information regarding field procedures are largely incomplete or missing. Little detail is known about the amount of definition drilling completed per year or the type of drill rigs used.

The deposit is drilled at an average spacing of 10 m using BGM (~40 mm) core diameter. In highly complex areas where mining was active, drill spacing was locally reduced to 5 m. Underground drill holes are generally less than 100 m in length.

Collar location surveys were performed by the mine surveyors. These provided accurate collar locations for the holes, and a check on the initial azimuth and dip was recorded for each hole. Prior to 2004, most of the drill holes in the database were surveyed downhole using a Sperry Sun[™] Single Shot instrument, with readings taken every 60 m, or by acid tubes, with readings every 30 m. In early 2004, downhole surveying used an Icefield Tools[™] M13 instrument. This provided azimuths and dips for each hole every 3 m down the hole. Readings were reviewed by staff and inaccurate entries were removed from the database.

11.1 Pre-2004 Analysis

11.1.1 Sample Preparation and Assaying Procedures

Limited information is available for procedures used during the exploration programs carried out before 2004. The drill core was logged using DLOG computer programs for data entry as well as for drill log printing. The data was entered directly into laptop computers and the rock units coded with 4-digit geology codes; mineralized sections were logged separately as nested units or primary units depending on quantities. Textural descriptions, rock colour and structure were also coded with 2-character fields. Remarks were typed into separate fields to characterize unique geology, structure or mineralization features.

All collar and survey information were tabulated in master files within the DLOG computer program. Completed logs were printed and the information was exported into ACAD and Vulcan software to facilitate plotting drill hole location maps and cross-sections.

As part of the diamond drill core processing procedures, all drill core was geotechnically logged. Two parameters were routinely measured and recorded: (1) Core recovery – the % of drill core recovered in every 3.05 m (10 foot) run, and (2) RQD (Rock Quality Determination) – the % of core within a run exceeding 10 cm in length. Skeena currently does not have access to the historical RQD and recovery data.

During the drill core logging process, portions of the core were selected for sampling based on lithology, mineralization, and alteration. Sample intervals varied from about 0.25 m up to 1.5 m though the optimum sample interval was 1.0 m. Sample intervals were always contained within one geologic unit and did not straddle contacts. Assay tags were used for sample identification and were inserted at the end of each sample interval. After the logging and photography had been completed, the core was sampled by means of splitting the core with a manual or pneumatic splitter or by cutting the core with a diamond bladed rock saw in the case of the massive sulphide zones. One half of the core was placed in plastic sample bags and sealed for shipment to the lab and the other half of the core was returned to the core box and then trucked to the unused gravel Pit at km 45 for long term storage; this storage area was turned into a logging facility for the 1998 drilling campaign. Sample bags containing core for analysis were either carried to the mine assay lab located adjacent to the logging facilities or packed in rice bags/plastic pails for shipment via truck to Independent Plasma Laboratories (IPL) for an independent check on select samples.

During 1996 and 1997, most of the drill core was processed at the core logging facilities located at the Eskay Creek mine site. However, during the 1998 drill campaign the drill core was processed at the core logging facilities located either at the Eskay Creek mine site or at Camp 45, an exploration site situated 45 km along the Eskay Creek Mine Road.

Both the Eskay Creek mine assay lab and IPL in Vancouver used very similar sample preparation and analytical procedures in processing drill core samples.

At IPL, all drill core samples were crushed to -10 mesh, riffle split and 250g pulverized to -15 mesh. Gold was assayed by fire assay (30g) with AA finish. All gold values greater than 1.00 g/t were reassayed by fire assay (30g) and finished gravimetrically. Silver was assayed by fire assay (30g) with AA finish. Every batch of 24 assays consisted of 22 samples, 1 internal standard or blank and a random re-weigh of 1 of the samples.

Analysis for lead, zinc, copper, arsenic and antimony was done by an ore grade assay method using a 0.50g sample digested in a dilute aqua regia solution. The above mentioned elements were analyzed for by AA. Calibration was done using three known standards and a blank. Internal quality control was accomplished by a system of standards, blanks and re-analysis. Mercury was analyzed for using an aqua regia digestion and finished by ICP.

At the Eskay Creek mine assay lab, the drill core was jaw-crushed to -1/8", riffle split and 250 to 300g pulverized. Gold was assayed by fire assay (10g) with AA finish. Every batch of 24 samples included two duplicate assay checks.

For analysis for zinc, antimony, copper, and lead, a 0.20g sample was digested in a heated solution of tartaric, nitric, perchloric and hydrochloric acids, and finished by AA. For mercury and arsenic, a 1.00g sample was digested in a heated solution of nitric, perchloric and hydrochloric acids and finished by AA.

11.1.2 QAQC Verifications 1997 to 2003

Prior to 2002, there was no formal QAQC program in place, however the Eskay Creek mine lab and external lab, IPL, were regularly monitored with pulp duplicates. In 2003, standards and blanks were inserted into the sample stream, however there is no record of what type of standards were used. Table 11-1 summarizes the number and type of standards, duplicates and blanks used during this period. Section 12 – Verifications of Analytical Quality Control Data, details the SRK reviewed and validated QAQC results for the 1997 to 2003 drilling and sampling campaigns.

	DDH	
Sampling Program	1997-2003	(%)
Sample Count	6190	100
Field Blanks (silica)	209	3
QC Samples unknown	3271	53
G-1 Standard	8	0.1
DS4 Standard	92	1
DS5 Standard	491	8
Unknown Standard	177	3
Field Duplicates	-	
Preparation Duplicates	524	8
Pulp Duplicates	985	16
Unknown Duplicates	433	7

Table 11-1:	Summary of	historical analytica	I quality co	ontrol data o	n the Eskay	Creek Project
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11.2 2004 Analysis

11.2.1 Sample Preparation and Assaying Procedures

A comprehensive sampling and assaying methodology was in place during the 2004 drilling campaign for both surface and underground drill holes (Barrick, 2005).

The diamond drill core was sampled at 1.0 m intervals, but smaller increments were applied where necessary to honour geological contacts. The core was submitted whole to the Eskay mine assay lab for gold and silver determination by fire assay. Samples reporting greater than 8 g/t gold-equivalent, using the following formula: AuEQ = Au + (Ag/68), were also analyzed for lead, zinc, copper, mercury and arsenic by atomic absorption spectrometry.

Drill logs and sample data were compiled into an SQL server-based database where all geological, assay and survey information were entered. Once the drill hole data had been approved the drill hole was locked from further editing and data was transferred to a Vulcan database to allow plotting and spatial interpretation. Hole locations were checked visually on import to detect for collar and survey errors.

Photographing of all diamond drill core using a digital camera was initiated in 2004. All core drilled for the mine geology department was either consumed during sampling or discarded once it had been logged. Skeena was unable to find photographic evidence of any of the core.

Production samples were also collected daily from each face. Representative geologic contacts were identified, and these chip samples were analyzed for gold, silver, mercury and antimony. Information collected from each face was entered daily into an inhouse Access database and then transferred to a Vulcan database.

Surface diamond drilling was overseen by the historical operators exploration group. Surface samples were sent to commercial laboratories in Vancouver for analysis, whereas underground samples were sent and processed at the Eskay Creek mine lab. Gold and silver were analyzed by fire assay and other elements were determined by ICP-MS. The last surface diamond drilling was conducted during the 2004 summer field season.

Holes drilled for the Regional Exploration group were shipped to the exploration camp. This camp has now been dismantled and all core was disposed of in Albino Lake, 9 km from the Eskay Creek mine site.

11.2.2 QAQC Verifications 2004

An official QAQC program was undertaken in 2004 whereby the Eskay Creek exploration team added standards, blanks and field duplicates to the sample stream and submitted them to an independent lab for checking (Table 11-2). Section 12 – Verification of Analytical Quality Control Data, details the SRK reviewed and validated QAQC results for the 2004 drilling and sampling program.

An audit was conducted on the 2004 QAQC results and procedures by Dr. Barry Smee, of Smee & Associates Consulting Ltd. (Gale *et al.*, 2004). The findings from the analysis identified a low bias in relation to Acme's internal standards for both aqua regia and fire assay methods. Acme corrected the inconsistencies with batch repeats. The sampling precision by means of using duplicate preparation and pulp samples was found to be within acceptable limits.

	DDH	
Sampling Program	2004	(%)
Sample Count	2456	100
Field Blanks	289	12
QC Samples unknown	1515	62
ESK13-1	12	0.5
ESK12-1	10	0.4
ESK72-1	9	0.4
ESK6114-1	21	1
ESK61-1	131	5
Field Duplicates	144	6
Preparation Duplicates	158	6
Pulp Duplicates	167	7

Table 11-2: Summary c	of historical analytica	I quality control data	on the Eskay Creek Project
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11.3 Specific Gravity Analysis

Specific gravity (SG) measurements were collected from diamond drill core in 1996 (250 measurements from 20 drill holes) and 1997 (84 measurements from 7 drill holes). Sections of drill core up to 10 cm long of split or whole core were used to determine the SG. The core was first weighed in air on a beam balance, and then weighed in water. One or more measurements were taken from each sample interval.

SG was calculated using a formula that was derived experimentally based on comparisons between actual measurements and analyses at Eskay Creek. This formula was utilized for all ore reserves calculated on site in the mine's history so that SG could be determined for mineralized intervals that did not have the directly measured values.

SG = (Pb + Zn + Cu) * 0.03491 + 2.67 (where all metals are reported in %).

A default value of 2.67 was applied to samples for which base metals were not reported. This is the average value of unmineralized rhyolite and mudstone host rocks.

The measured SG values from the early drill programs were primarily from relatively low base metal, 21B-style mineralization. The formula is therefore likely biased on the low side for rocks with higher base metal content.

11.4 Analysis by Skeena

In early 2018, Skeena was given access to the historical Operators proprietary database ("historical database"), which had been held in confidence since the mine closed in 2008. The database files, assay certificates, drill hole logs, and report files were stored in various locations and in various states of order. No single complete data set was located.

Between May and July 2018 Skeena personnel compiled and reviewed all available drilling and assay data to rebuild and produce a validated database in Microsoft Access[™] format. The historical database originated as a Vulcan file that was extracted and used as the building block for the final Skeena database ("the Database").

Digital certificates of original and rerun assays were located for the years 1999 to 2004 from the Eskay Creek mine laboratory as well as from three Independent laboratories: IPL, Bondar Clegg and Acme Analytical (Acme). Although only a partial set, the assays with certificates were imported into the Database and took precedence over any other assay values within the historical database. A total of 27,609 of the 426,367 assays in the Database were validated with original certificates. Gold and silver make up most of the assays in the Database, whereas base metals (lead, copper, zinc) and deleterious elements (arsenic, mercury, antimony) account for a lesser proportion in the Database because they were historically selectively analysed.

Lower detection limit (LDL) inconsistencies were encountered in the historical database. The Eskay Mine laboratory did not consider values below 1 g/t Au and 10 g/t Ag as significant, therefore those grades were either set to a default of 0.5 g/t Au and 5 g/t Ag or left as <1 g/t Au and <10 g/t Ag. Base metal and deleterious elements below detection limits were set to 0.0%. Due to the high cut-off grades at the time that the mine was in production, the use of these default lower detection limits had little impact. Skeena reviewed the methodology and assays certificates from the Eskay mine laboratory and determined reporting down to 0.1 g/t for Au and Ag. For assays below this true detection limit, a value of half of this limit was applied in the Database (0.05 g/t for Au and 0.05 g/t for Ag and 0.005% for Pb, Cu, Zn, As and Sb). In addition, all LDL's from the Independent assay laboratories were originally set to 0.0 g/t in the historical database for all elements analyzed. Skeena reset the LDL's to the actual limits used by the Independent laboratories at the time. Table 11-3 shows the detection limits from the historical database along with the modified LDL used in the Database.

		GOLD			SILVER	
Lab	Historical LDL (g/t)	Lab LDL (g/t)	Skeena LDL (g/t)	Historical LDL (g/t)	Lab LDL (g/t)	Skeena LDL (g/t)
Acme	0	0.0005	0.001	0	0.1	0.05
Bondar Clegg	0.0	0.069 *	0.035	0	0.069 *	0.035
IPL	0.0	0.034 *	0.017	0	1.714 *	0.85
Eskay	0.5	0.1	0.05	5	0.1	0.05
TSL	0.0	0.034 *	0.017	0	1.714 *	0.85
unknown**	0.0	0.069 *	0.035	0	0.69 *	0.35

Table 11-3: Lower detection limit (LDL) changes in the Database for gold, silver, base metal and deleterious elements

	BASE METALS	LEAD		ZINC		COPPER	
Lab	Historical LDL (%)	Lab LDL (%)	Skeena LDL (%)	Lab LDL (%)	Skeena LDL (%)	Lab LDL (%)	Skeena LDL (%)
Acme	0	0.00005	0.001	0.00001	0.001	0.00001	0.001
Bondar Clegg	0.0	0.01	0.005	0.01	0.005	0.01	0.005
IPL	0.0	0.01	0.005	0.01	0.005	0.01	0.005
Eskay	0.0	0.01	0.005	0.01	0.005	0.01	0.005
TSL	0.0	0.01	0.005	0.01	0.005	0.01	0.005
unknown**	0.0	0.01	0.005	0.01	0.005	0.01	0.005

	DELETERIUS ELEMENTS	ARSENIC		MERCURY		ANTIMONY	
Lab	Historical LDL (%)	Lab LDL (%)	Skeena LDL (%)	Lab LDL (%)	Skeena LDL (%)	Lab LDL (%)	Skeena LDL (%)
Acme	0	0.00001	0.001	0.010	0.005	0.00001	0.001
Bondar Clegg	0.0	0.01	0.005	3	1.5	0.01	0.005
IPL	0.0	0.01	0.005	3	1.5	0.01	0.005
Eskay	0.0	0.01	0.005	1	0.5	0.01	0.005
TSL	0.0	0.01	0.005	1	0.5	0.01	0.005
unknown**	0.0	0.01	0.005	1	0.5	0.01	0.005

* Converted from ounces per tonne (opt) to g/t

** Barrick noted that it was assumed to be Bondar Clegg, therefore Bondar Clegg lab values were used

Skeena inherited a database that had a total of 41,624 duplicate primary sample numbers. The duplicate sample numbers were a result of the historical Operators reusing the same sample tag number already used by previous drilling campaigns in different years. Skeena rectified the conflicts by creating a new column in the Database that uniquely identifies the sample by year of drilling first and then by sample number.

For data integrity purposes, the Database retains all the original sample numbers with unmodified assay values in separate, searchable columns. This applies to multiple element rerun samples as well. A priority system was set up so that a final "element_best" column gives precedence to assay values with validated assay certificates over unconfirmed samples.

Drill core at Eskay Creek was selectively sampled by the historical Operators based on visual estimations of mineralization, which resulted in many unsampled intervals within the body of mineralization. Skeena identified these unsampled intervals with an assigned value of -99 in the database. In some cases, samples were not analyzed due to insufficient material provided to the laboratory or samples not received. The historical Operator coded these samples with one of five default values. Skeena denoted these samples with a value of -66 in the database.

Once the Skeena database had been rebuilt it was validated for gaps, overlapping intervals, duplicates, and lower detection limits. Surface drill hole collar locations were checked against the topographic surface for accuracy, and underground drill hole collar locations were checked against underground development wireframes. Where available, drill holes collar locations were confirmed from the original drill logs.

Following validation, 306 holes were flagged in the Database and were excluded from the data export used to create the Mineral Resource Estimate (see Appendix A). The excluded drill holes include:

- 31 holes where collar locations were reported as suspicious in 2004 and 2006 internal company Resource reports;
- 4 surface holes where mineralized intervals do no correlate with underground development;
- 19 holes with duplicate sample numbers and/or overlapping assay intervals;
- 24 drain holes;
- 228 surface holes south of 8250N that were outside the extents of the Mineral Resource estimate.

Drill holes were imported using a mine grid that is rotated 23 degrees to the east. The Skeena Database was updated with complete UTM and mine coordinates based on the formula provided by McElhanney (McElhanney, 2004). The mine grid coordinates were established by applying a rotation and scale factor as well as northing, easting and elevation shifts to the UTM values around point RP248, in the following order:

Rotation: -24° 14' 45" Combined Scale Factor: 1.0004459 Northing Shift: -6268630.813m Easting Shift: -401584.000m Elevation Shift: 0.000

11.5 SRK Comments

In the opinion of SRK the historical sampling preparation, security and analytical procedures used during the years 1997 and 2004 are consistent with generally accepted industry best practices and are therefore adequate.

12 Data Verification

12.1 Verifications by SRK

The Database used for the 2018 Mineral Resource Estimate was submitted to SRK on July 6th, 2018 (the close out date for the Database) for a final review before Skeena proceeded with generating mineralization domains. Skeena has ensured that the database inherited from the historical Operator was verified using historical assay certificates and logs. SRK has conducted a review of both the current Database against the historical database. All of the available assay certificates from the historical Operator, representing about 12% of the entire resource database, were reviewed and validated against assays in the Database. In addition, SRK has confirmed and reviewed quality assurance and quality control programs (QAQC) and analysed the results from these programs. After the review, SRK concluded that the Database was sufficiently reliable for resource estimation.

Note that although the resource has been estimated for the base metals (lead, copper and zinc) and deleterious metals (arsenic, mercury and antimony), the database verifications and validations are primarily focused on gold and silver assays. At the request of SRK, the units for arsenic and antimony were changed from percent to ppm.

12.1.1 Database

The Database was provided to SRK in .csv format and included collar, survey, assay, and geology files.

SRK conducted routine verifications to ascertain the reliability of the electronic drill hole database provided by Skeena. All assays in the Database were verified against Eskay mine laboratory and Independent lab assay certificates, where assay certificates were available. No significant errors or omissions were discovered; however, the large number of missing assay certificates is a limitation on the validation effort.

The Database was checked for missing values, duplicate records, overlapping intervals, sample intervals exceeding maximum collar depths, borehole deviations, drill holes collars versus topography, laboratory certificate vs database values and special values (i.e. non-numeric or less than zero). Minor errors were reviewed with Skeena's Resource Geologist and resolved prior to geological modelling and resource estimation. All modifications to the Database were checked to ensure appropriate allocation. These included assay priorities ranking and accurate, consistent LDL updates.

SRK viewed the collar locations of underground drill holes by means of 50 m sections with drill hole volume projections of 25 m. There was no obvious discrepancy between collar location and underground workings. Viewed on 50 m sections, the drill holes collars originating from the surface appear to correlate reasonably well with the topography layer. There are, however, several drill holes that occur approximately 20 m above or below the surface layer. Given the fact that the collar locations have more accurate spatial resolutions than the topography surface, this discrepancy is

not thought to be a material concern. SRK cross-checked the UTM and mine grid coordinates from the McElhanney report with the final Skeena database. The checks confirmed that the UTM-mine grid shift had been done accurately.

12.1.2 Site Visit

Ms. S. Ulansky, PGeo, a Qualified person ("QP") as defined by Canadian National Instrument NI 43-101 standards of disclosure, visited the Eskay Creek Project on the June 27th and June 28th, 2018 with two representatives from Skeena Resources (Ms. K. Dilworth and Mr. J Himmelright). The purpose of the visit was to see localities that had been described in earlier reports first-hand and to validate the areas with independent checks. The following areas were visited and verified:

- Approximately 50 drill hole collars, located on twenty-two drill pads, were located and resurveyed. GPS readings were taken along with general azimuth and dip orientations of the remaining casing. These independent GPS readings agreed within +/-5 m of the collar coordinates in the database, noting that the handheld GPS used by SRK had an accuracy of +/-5 m. All the drill holes surveyed were cased, although many casing caps were missing or not placed there in the first place. Seventeen of the drill holes had labels etched onto the casing caps and some of these locations were photographed (Figure 12-6):
- Five east-west trenches were visited, and their localities verified;
- The borrow Pit that was used for making mine laboratory assay 'blank' samples;
- The historical regional exploration camp at km 45, which is now in the possession of another exploration company;
- Albino Lake, where all drill core and low-grade waste material was disposed.



Figure 12-1: Drill hole locations with labelled casing

12.1.3 Verifications of Analytical Quality Control Data

Skeena made available to SRK the assay results for analytical quality control data accumulated on the Eskay Creek property between 1997 and 2004. Although not complete, the Eskay Creek mine did initiate QAQC measures into their sample stream in 1997. With progressive years the QAQC protocol became more comprehensive and detailed. SRK independently compiled and summarized the QAQC assays directly from the available assays for the years 1999, 2001, 2002, 2003 and 2004. Table 12-1 summarizes all the QAQC procedures in place in relation to the years that the samples were inserted.

Year	Lab(s)	Type(s)	Certificate Availability
1997	Eskay mine lab	Repeat (pulp?)	No certificates found
1998	Eskay mine lab Bondar Clegg IPL MIN-EN ALS Chemex	Round robin standards, blanks, field and pulp duplicates	No certificates found
1999	Eskay mine lab	Pulp repeats	Certificates found
2001	Eskay mine lab	Pulp repeats	Certificates found
2002	Acme Analytical	In-house standards, in-house pulp repeats	Certificates found
	Eskay mine lab	Unknown standards and blanks	Certificates found
2003	Acme Analytical	In-house standards, in-house prep, pulp and reject repeats	Certificates found
	Eskay mine lab	Standards, blanks, prep, pulp and reject repeats	Certificates found
2004	Acme Analytical	In-house standards, in-house prep, pulp and reject repeats	Certificates found

Table 12-1: Drilling and sampling years versus QAQC procedure in place

1995-1997 QAQC Data

Prior to 2002, there was no formal QAQC program in place, however, the Eskay mine lab was regularly monitored via pulp replicates, which were processed at the external lab: IPL. Some of these replicate samples have been discovered in the original database and have been updated into the updated QAQC Database. Note that the assay certificates for 1997 were not available.

SRK compiled 190 samples out of a total of 17 drill holes from the 1997 data files. Figure 12-2 and Figure 12-3 are scatterplots of the original sample versus the pulp repeat for gold and silver, respectively. The results show high correlation between the original and the duplicate assays.



Figure 12-2: Scatterplot of original gold assay (Eskay mine laboratory) and pulp repeat (IPL) from the 1997 drilling campaign



Figure 12-3: Scatterplot of original silver assay (Eskay mine laboratory) and pulp repeat (IPL) from the 1997 drilling campaign

1998 QAQC Data

In 1998 a series of blanks were inserted into the Eskay mine laboratory assaying procedure. Some anomalous background values were observed; however, the source of the blank material has not been documented.

Field duplicates initially tested at the Eskay mine laboratory were sent to IPL labs for independent checking. There was good agreement between the original sample and field duplicate for Au and Ag as well as the base and deleterious elements.

Pulp duplicates were also assessed within the Eskay mine laboratory as well as sent to IPL for an independent check. The data and graphs for these results are extensive and numerous, but the data mostly indicate high correlation between the original and the duplicate assays.

1999 QAQC

SRK independently compiled all the mine assay certificates available and 126 pulp duplicates from the 1999 drilling campaign. A high correlation between the original and the duplicate assays were observed (Figure 12-4).



Figure 12-4: Gold pulp repeat samples from the 1999 drilling campaign

2001 QAQC

SRK independently compiled all the mine assay certificates and retrieved 306 pulp duplicates from the 2001 drilling campaign. Figure 12-5 shows a high correlation between the original and the duplicate assays.



Figure 12-5: Gold Pulp repeat samples from the 2001 drilling campaign

2002 QAQC

No Eskay Mine lab pulp repeats were documented in 2002. The surface drill hole samples were, however, being routinely sent to Acme for processing. Acme inserted three of their own in-house standards: DS3, DS4 and DS4 (Table 12-2). Acme In-house pulp repeats were also routinely completed and monitored.

Standard Type	Official value (Au)	STDEV (-3)	STDEV (+3)
DS3	21.2	17	25.4
DS4	27.4	22.9	31.9
DS5	43.1	38.8	47.4

Table 12-2. Achie in-nouse standards used during 2002, 2005, and 200^{-1}	Table 12-2:	Acme in-house st	tandards used	during 2002	, 2003, and 2004
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SRK located the standard certificates for DS3, DS4 and DS5 and independently compiled quality control charts using the results from the original exploration certificates. Note that only the results for gold have been documented, but the standard certificates are valid for silver, lead, zinc, copper, arsenic, mercury and antimony, as well. Figure 12-6 and Figure 12-7 are the results of the in-house QC validation. All the samples fit within the acceptable limit of 3 standard deviations.

Page 90



Figure 12-6: Acme in-house standard (DS3) inserted during the 2002 drilling campaign



Figure 12-7: Acme in-house standard (DS4) inserted during the 2002 drilling campaign

2003 QAQC

In 2003, the Eskay Mine lab started to implement QAQC procedures into the sampling process. Control blanks and standards were added to the sample stream, but no record of the type, acceptable value and standard deviation of the control samples submitted have been found.

Acme inserted their own in-house standards, blanks and pulp repeats into the sample stream. Prep, pulp and reject duplicates were routinely inserted by Acme as well. Two of their in-house standards (DS4 and DS5) were graphed by SRK and all the samples fit within 3 standard deviations of the acceptable values, although there appears to be a slight low bias (Figure 12-8 and Figure 12-9).



Figure 12-8: Acme in-house standard (DS4) during the 2003 drilling campaign



Figure 12-9: Acme in-house standard (DS5) during the 2003 drilling campaign

2004 QAQC

An official QAQC program was undertaken in 2004 whereby the Eskay Creek exploration team added standards, blanks and field duplicates to the sample stream and submitted them to an independent lab for checking. Acme was used as the umpire lab and all procedures were well documented (Barrick, 2005).

Five in-house assay standards were manufactured by ALS Chemex using material collected from the Eskay Creek Mine (Barrick, 2004). The acceptable values were certified through round-robin analyses at six different labs and statistically evaluated by the Chief Geochemist. The standards and their acceptable values and limits have been tabulated below (Table 12-3). One in every 50 drill core samples was a QAQC standard.

Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
DS4	Au g/t	22.9	24.4	27.4	30.4	31.9	1.5	30g FA, instrumental
DS4	Ag g/t	237	251	279	307	321	14	4-acid, instrumental
Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
ESK61-1	Au g/t	1.2070	1.3259	1.5637	1.8015	1.9204	0.1189	30 g FA AAS
ESK61-1	Ag g/t	32.6309	33.3950	34.9233	36.4516	37.2158	0.7641	130g ICP- MS
Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
ESK6114- 1	Au g/t	3.7155	3.9230	4.3381	4.7531	4.9607	0.2075	30 g AAS
ESK6114- 1	Ag g/t	215.1785	225.1665	245.1427	265.1188	275.1068	9.9881	30g Grav
Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
ESK14-1	Au g/t	8.9315	9.5703	10.8478	12.1252	12.7640	0.6387	10g Grav
ESK14-1	Ag g/t	757.0433	785.7414	843.1375	900.5336	929.2317	28.6981	10g Grav
							-	
Standard	Flement	-3SD	-2SD	Expected	±2SD	±35D	SD	Method

Table 12-3: List of the Eska	v mine lab standard types and	d their accepted results
	y mine lab olandara typeo an	

Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
ESK72-1	Au g/t	21.8519	22.9641	25.1887	27.4132	28.5255	1.1123	10g Grav
ESK72-1	Ag g/t	42.7441	46.3485	53.5575	60.7665	64.3709	3.6045	10g Grav

Standard	Element	-3SD	-2SD	Expected	+2SD	+3SD	SD	Method
ESK12-1	Au g/t	22.5185	24.5219	28.5288	32.5357	34.5391	2.0034	10g Grav
ESK12-1	Ag g/t	379.4767	393.9158	422.7940	451.6722	466.1113	14.4391	10g Grav

Blanks have been collected from barren rocks found regionally around the mine. One in every 50 drill core samples was a QAQC blank.

In 2004, the historical Operator generated control charts in Excel and included the results in the month-end drilling reports. These control charts showed that the QAQC measures taken to ensure unbiased, accurate and precise sampling were effective. SRK recreated standard and blank charts based on some of the data that that the previous Operator used, and the results all occur within an acceptable range of values for gold (Figure 12-10 and Figure 12-12).

Page 94



Figure 12-10: Standard ESK14-1 from the 2004 drilling campaign



Figure 12-11: Standard ESK12-1 from the 2004 drilling campaign



Figure 12-12: Standard ESK72-1 from the 2004 drilling campaign

Sample repeatability at Eskay Creek was closely monitored during the 2004 drilling campaign by the regular insertion of field duplicates into the sample stream. Field duplicates at the Eskay mine laboratory performed well with the duplicate samples (Figure 12-13).



Figure 12-13: Gold field duplicate samples from the 2004 drilling campaign

12.1.4 Summary – Verifications by SRK

The results of the analysis indicate that the historical data are unbiased. A large number of assays in the Database were validated against the original digital assay certificates. These assays ranged from the years 1999 to 2004, with less than 1% errors found. SRK concluded that the current Database is a proper reflection of the assay grades reported in the assay certificates.

13 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical testing has been done by the current issuer on the Project, however, Skeena is currently carrying out a metallurgical study during the 2018 drilling program.

Limited historical records of mineral processing of gold and silver recovery during the historical Operator's mining campaign have been located. A summary of the mill rate and metallurgical recoveries taken from the 2006 internal technical report (Barrick, 2007) is presented in Table 13-1.

	•	•	•	
Zone	Mill Rate	Con. Ratio	Au Recovery (%)	Ag Recovery (%)
21C	275	5.3	81	88
21B	325	4.8	84	96
21Be	325	4.8	84	96
21E	225	5.3	74	93
HW (upper)	300	4.8	80	91
HW (lower)	275	4.1	79	91
NEX Contact Zone	325	4.8	92	96
NEX (Rhyolite)	225	5.5	69	87
Pumphouse	275	6.2	73	96

 Table 13-1: Gold and silver mill recoveries by zone at the Eskay Creek Project

Historically, the higher-grade portions of the orebody from the Eskay Creek mine were sent directly to one of two smelters: Noranda's Horne smelter in Quebec, and Dowa's smelter in Kosaka, Japan. The direct shipping ore (DSO) contained significant amounts of penalty elements such as mercury, antimony, and arsenic. As a result, this ore was crushed and blended at the mine site and then sold to one of the above smelters without any further processing.

The remainder of the ore was blended to fit within the parameters outlined in Table 13-2 below, and then processed on-site in a gravity and flotation plant. Gravity concentrate was shipped offsite for refining, and the flotation concentrate was shipped to the Noranda smelter for processing.

	Hg (ppm)	Sb (%)		
Smelter (DSO)	> 200	> 1		
Mill	< 200	< 1		

 Table 13-2: Parameters used for metallurgical designation

In addition, high sulphide ore, which was considered to have a concentration ratio that was too low to be considered economic in the on-site concentrator, was also destined to be shipped to DSO.

Records from production of the Eskay Creek orebodies over the mine life spanning from 1995 to 2008 is summarized in Table 13-3 (Ministry of Energy, Mines and Petroleum Resources Mining and Minerals Division, 2008). A break down of life of mine production shows that Direct Shipping Ore totaled 1.2 Mt, while 1.05 Mt were milled on-site.

Page 98

Year Gold	Gold	Gold	Silver	Silver	Ore Tonnes	Ore Tonnes
Produced	Produced	Produced	Produced	Produced	Milled	shipped
	(oz)	(kg)	(kg)	(oz)		direct
1995	196,550	6,113	309,480	9,950,401	0	100,470
1996	211,276	6,570	375,000	12,057,000	0	102,395
1997	244,722	7,612	367,000	11,799,784	0	110,191
1998	282,088	8,774	364,638	11,723,841	55,690	91,660
1999	308,985	9,934	422,627	13,588,303	71,867	102,853
2000	333,167	10,363	458,408	14,738,734	87,527	105,150
2001	320,784	9,977	480,685	15,454,984	98,080	109,949
2002	358,718	11,157	552,487	17,763,562	116,013	116,581
2003	352,069	10,951	527,775	16,969,022	115,032	134,850
2004	283,738	8,825	504,602	16,223,964	110,000	135,000
2005	190,221	5,917	323,350	10,396,349	103,492	78,377
2006	106,880	3,324	216,235	6,952,388	123,649	18,128
2007	68,000	2,115	108,978	3,503,861	138,772	0
2008	15,430	480	27,800	893,826	31,750	0
TOTAL	3,272,628	102,112	5,039,065	162,016,018	1,051,892	1,205,604

Table 13-3: Eskay Creek mine production from 1994 to 2008

14 Mineral Resource Estimates

14.1 Introduction

The Mineral Resource Statement presented herein represents the mineral resource evaluation prepared by Skeena for the Eskay Creek Project in accordance with the Canadian Securities Administrators' National Instrument 43-101.

The mineral resource model prepared by Skeena considers 7,583 historical holes drilled by previous exploration companies, dating as far back as 1936, and by the subsequent mining Operator during the period of 1994 to 2008. The resource estimation work was completed by Ms. K. Dilworth and was reviewed and accepted by Ms. S. Ulansky, PGeo (EGBC#36085), Senior Resource Geologist with SRK, a Qualified Person as this term is defined in NI 43-101. The effective date of this mineral resource statement is July 6, 2018.

This section describes the resource estimation methodology and summarizes the key assumptions considered. In the opinion of SRK the resource evaluation reported herein is a reasonable representation of the global gold and silver Mineral Resources found in the Eskay Creek Project. 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 the Canadian Securities Administrators' National Instrument 43-101. Mineral resources are not mineral reserves and do not have demonstrated economic viability. 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 Eskay Creek Project Mineral Resources 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 and silver mineralization and that the assay data are sufficiently reliable to support mineral resource estimation.

Leapfrog Geo[™] (version 4.2.3) was used to construct the litho-structural model and mineralization domains. Snowden Supervisor [™] (version 8.0) was used to conduct geostatistical analyses, variography and a portion of model validation. For block modelling, Maptek Vulcan[™] (version 10.1.5) software was used to prepare assay data for geostatistical analysis, construct the block model, estimate metal grades and to report the Mineral Resources.

14.2 Resource Estimation Procedures

The Mineral Resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Construction of wireframe models for the litho-structural model;
- Construction of wireframe models for Au-Ag mineralization;
- Definition of resource domains;

- Data conditioning (compositing and capping) for geostatistical analysis and variography;
- Block modelling and grade interpolation;
- Resource validation;
- Resource classification;
- Assessment of "reasonable prospects for economic extraction" and selection of appropriate cut-off grades; and
- Preparation of the Mineral Resource Statement.

14.3 Resource Database

The Eskay Creek database used for the creation of the resource estimate contains 7,583 historical drill holes for 651,332 m of core in the extents of the resource estimate. This database is a compilation of validated historical drill holes and includes 6,061 underground drill holes and 1,522 surface drill holes.

Drill hole spacing throughout the orebody varies from 5 m, where underground production drilling encountered complex areas, to 25 m at the surface. The average drill hole spacing is approximately 10 m throughout the deposit. Sampling at Eskay Creek was selective and primarily based on visual estimations of sulphide percent. Gold and silver were systematically processed however, lead, copper, zinc, mercury, antimony and arsenic were inconsistently sampled from one drilling campaign to the next. For underground drilling, lead, copper, zinc, mercury, antimony and arsenic were assayed when samples exceeded 8 g/t AuEQ (where AuEQ equaled Au+(Ag/68)) (Barrick, 2005).

Figure 14-1 shows the collar positions and traces of all drill holes in the validated historical database.



14.4 Solid Body Modelling

14.4.1 3D Litho-Structural Model

In April 2018 Ms. Amelia Rainbow, PhD., PGeo, (Independent Consultant) was contracted to create the Eskay Creek litho-structural model, focusing on the area north of 8250N. The interpretation is based predominantly on historical surface and underground drill hole data. Orientated drill core, geological level plans, cross-sections or structural data were not available. Surface geological maps were found and made available to Ms. Rainbow part way through the modelling processes. They were included into the structural interpretation where possible.

The historical database contained more than 200 individual lithology codes. Lithologies were grouped in Leapfrog [™] into a separate column in accordance with known stratigraphy. Three main lithologies (rhyolite, contact mudstone and hanging-wall andesite) were recognized as being meaningful for resource modelling. Lithology units were further subdivided into lithology domains by one or more cross-cutting faults. Mineralization continuity was defined within these mutually exclusive lithological domains.

Dr. Ron Uken, a Principal Structural Geologist with SRK, conducted a Peer Review of the 3D lithostructural model. He simplified the structural model, reducing the number of lithological domains from 25 to 5, and faults from 43 to 5 (Figure 14-2).



Figure 14-2: Simplified litho-structural model used to create the 2018 mineralization domains

14.4.2 Mineralization Domaining

Mineralization domains were created using 2 m composites and a numerical grade interpolant with approximately 50% probability of a combined precious and base metal cut off grade being greater than 1 g/t. Minor adjustments to the probability and grade cut-off thresholds, where necessary, were made locally within each domain to maintain interpreted continuity. Mineralization domains were created in each lithology within the litho-structural domains and were guided by a structural trend which followed the base of the Contact Mudstone. Domaining was initially constrained using a combination of gold, silver, lead, zinc and copper assay composites, however, base metals were not included in the final block model AuEQ calculation as only gold and silver were considered primary importance at this stage of the Project.

The resulting mineralization solids were limited to a snapping distance of 12 m due to the inherited resolution established in the litho-structure model. As a result, mineralization wireframes were not snapped directly to the top or bottom of the grade interval specifically defined by the numeric interpolants. Low grade intervals were inadvertently included into the final mineralization domains on a limited scale.

For consistency, the mineralization domain solids were subsequently subdivided and named using the previously established historical mining area zones: 22, 21A, 21C, 21B, 21Be, 21E, HW, NEX, 109 and Pumphouse (as shown in Figure 14-3). For the purposes of this Technical Report, "domains" refer to the mineralization solids within the historically defined zones.



14.4.3 Underground Workings

A complete dataset for all of the underground workings were found in 3D Vulcan-format files. The historical underground workings are a combination of stopes, lifts and development drives. The previous Operator reported that all the lifts in the stopes were backfilled with cobble, where cobble was made at the site in a batch cement plant that consisted of screened gravel from the Iskut River supplemented with 4-12% cement (Barrick, 2005).

Skeena checked the location of the underground drill holes in relation to the underground working solids and found no obvious spatial errors. Although the underground workings were routinely surveyed, there is a small measure of uncertainty in the location of the solids due to survey method limitations. As a measure of caution against possible location discrepancies and unknown ground conditions, a 3 m buffer around the underground workings was employed to deplete the final resource estimate. Figure 14-4 and Figure 14-5 show the underground workings used to deplete the current estimate in plan view and long section, respectively.

14.5 Data Analysis

Ten mineralization domain solids were used to code the assay file in the database for geostatistical analysis and to optimize the interpolation parameters for grade estimation. The mineralization domain codes are as follows: 10, 20, 30, 40, 50, 60, 70, 80, 95, 99 and they correspond to the historical mining area zones as follows: 22, 21A, 21C. 21B, 21BE, 21E, HW, NEX, PUMP, 109, respectively. These coded intercepts were used to analyse sample length and generate statistics for assays and composites. Table 14-1 summarizes the statistical analysis of original assays for gold and silver for each domain. Table 14-2 summarizes the statistical analysis of lead, copper and zinc for each domain and Table 14-3 summarizes the statistical analyses of arsenic, mercury, and antimony for each domain.




Page	108
i ugo	100

Domain	No. of samples	Mean	сѵ	Min	25th Q	Median	75th Q	Max				
	GOLD g/t											
22	1,452	1.50	4.81	0.001	0.270	0.500	1.100	225.56				
21A	5,968	5.11	3.61	0.000	0.500	1.200	2.800	677.80				
21C	29,603	4.33	4.91	0.000	0.050	1.700	3.600	1774.40				
21B	40,601	15.29	5.33	0.000	0.200	1.800	5.400	9659.00				
21BE	22,368	14.06	4.66	0.000	1.000	2.400	6.400	2072.70				
21E	1,554	4.83	2.27	0.000	0.600	1.700	3.700	115.90				
HW	27,135	5.36	4.14	0.017	0.050	1.700	3.700	1139.20				
NEX	35,313	6.43	6.10	0.000	0.200	1.700	3.700	1971.10				
PUMP	3,416	6.93	3.42	0.017	0.050	2.100	6.000	704.80				
109	11,359	12.29	3.72	0.000	1.500	3.400	8.800	1625.80				
	1	1		SILVER g/t	1			1				
22	1,452	49.22	3.48	0.05	2.00	5.20	28.20	3461				
21A	5,968	70.12	6.12	0.00	1.00	5.00	29.00	22353				
21C	29,602	64.62	6.70	0.00	0.50	0.50	17.00	36696				
21B	40,601	613.37	3.93	0.00	0.50	14.00	82.00	44767				
21BE	22,368	771.89	4.71	0.00	8.00	38.00	181.00	155086				
21E	1,554	230.00	4.29	0.05	0.50	16.00	52.95	17274				
HW	27,135	256.23	5.55	0.00	0.50	15.00	68.00	56359				
NEX	35,312	255.73	7.44	0.00	0.50	9.00	37.00	59545				
PUMP	3,416	158.73	5.18	0.50	0.50	14.00	76.00	23117				
109	11,359	17.88	7.43	0.00	0.50	0.50	18.00	6103				

Table 14-1: Summary statistics for the drill hole gold and silver assays by domain

Page	109
i ugo	100

Table 14-2: Summary statistics for the drill hole base metal assays by domain

Domain	No. of samples	Mean	cv	Min	25th Q	Median	75th Q	Max
	L		l	LEAD %		L	l	
22	1,325	0.14	4.09	0.00	0.00	0.02	0.07	15.09
21A	3,319	0.14	3.34	0.00	0.01	0.02	0.10	11.92
21C	9,408	0.24	3.97	0.00	0.01	0.03	0.14	20.20
21B	15,647	1.45	2.08	0.01	0.03	0.20	1.09	53.15
21BE	8,345	1.66	2.07	0.01	0.05	0.22	1.23	24.40
21E	798	0.35	3.33	0.00	0.01	0.02	0.09	10.75
HW	9,486	2.50	1.60	0.01	0.09	0.64	2.97	33.80
NEX	10,294	1.11	2.46	0.00	0.02	0.13	0.73	29.49
PUMP	1,278	0.16	2.65	0.01	0.01	0.04	0.16	5.30
109	4,480	1.57	1.78	0.01	0.17	0.61	1.77	65.36
				ZINC %				
22	1,325	0.18	3.65	0.00	0.01	0.03	0.10	15.36
21A	3,319	0.23	2.92	0.00	0.01	0.04	0.18	13.52
21C	9,408	0.44	2.80	0.00	0.02	0.08	0.27	33.10
21B	15,652	2.52	2.13	0.01	0.08	0.35	1.72	44.40
21BE	8,359	2.82	2.08	0.01	0.09	0.38	2.00	39.44
21E	798	0.66	3.19	0.01	0.05	0.10	0.19	19.08
HW	9,486	3.81	1.59	0.01	0.16	0.93	4.30	48.88
NEX	10,297	1.74	2.41	0.00	0.05	0.22	1.15	35.00
PUMP	1,278	0.31	3.14	0.01	0.03	0.10	0.30	21.00
109	4,477	2.40	1.60	0.01	0.20	0.90	2.79	31.80
	ſ		ſ	COPPER %		ſ	ſ	
22	1,325	0.02	4.87	0.00	0.00	0.00	0.01	1.44
21A	3,313	0.02	3.27	0.00	0.00	0.01	0.01	1.51
21C	9,408	0.07	3.65	0.00	0.01	0.01	0.04	5.44
21B	15,589	0.34	2.77	0.00	0.01	0.02	0.16	26.40
21BE	8,299	0.42	2.53	0.01	0.01	0.04	0.22	10.70
21E	798	0.11	3.25	0.00	0.01	0.01	0.03	3.95
HW	9,484	0.40	2.02	0.01	0.01	0.07	0.38	35.00
NEX	10,291	0.20	3.16	0.00	0.01	0.01	0.08	8.58
PUMP	1,278	0.06	3.13	0.01	0.01	0.01	0.05	4.22
109	4,104	0.04	6.07	0.01	0.01	0.01	0.01	5.70

Domain	No. of samples	Mean	сѵ	Min	25th Q	Median	75th Q	Max
		L	A	RSENIC ppr	n	L	l	
22	1,314	841	2.09	10	100	200	599	14,191
21A	3,100	5,636	6.32	10	68	200	600	540,000
21C	8,516	315	3.34	50	100	200	300	47,600
21B	11,561	1,410	5.62	50	200	500	1,200	530,000
21BE	6,939	1,665	1.60	50	200	500	1,700	22,000
21E	647	276	1.32	50	100	200	300	5,000
HW	7,673	746	1.99	50	200	400	900	10,000
NEX	8,910	604	1.82	25	200	300	600	27,000
PUMP	1,174	727	1.80	50	200	400	700	14,800
109	3,639	600	1.51	50	100	300	700	10,800
	1	1	м	ERCURY pp	m	1	1	
22	1,325	5	1.75	0	1	2	5	100
21A	2,545	299	5.81	0	1	10	43	29,000
21C	8,345	19	2.30	0	3	8	18	887
21B	14,110	593	3.59	1	12	40	179	44,775
21BE	9,758	163	3.79	1	8	31	104	17,590
21E	631	27	1.93	1	3	10	24	470
HW	9,083	34	1.37	0	5	16	45	600
NEX	9,762	33	2.52	0	4	11	29	2,488
PUMP	1,173	37	4.50	1	7	15	26	4,160
109	4,643	14	1.29	1	3	9	19	387
			AI	NTIMONY pp	m			
22	1,325	473	6.26	3	19	50	155	64,240
21A	3,059	4,358	7.73	0	25	100	500	591,000
21C	8,522	721	5.45	5	100	100	400	162,500
21B	14,701	11,401	3.23	3	100	500	3,500	545,000
21BE	9,850	4,257	3.36	50	100	500	1,600	516,400
21E	647	6,884	4.13	31	100	300	1,100	379,000
HW	9,180	1,887	3.35	15	100	400	1,300	249,000
NEX	9,902	2,234	4.85	8	100	300	900	342,000
PUMP	1,166	3,245	4.99	50	200	600	1,800	382,000
109	4,735	269	3.62	50	100	100	300	50,800

Table 14-3: Summary statistics for the drill hole deleterious element assays by domain

The 21A and 21B Domains, hosted in the Contact Mudstone, have elevated levels of arsenic, mercury and antimony as compared to the rest of the domains. The 21A Domain is geologically and geochemically equivalent to the 21B Domain which accounted for the bulk of mineralization historically mined at Eskay Creek. Smelter penalties for the elevated concentrations of arsenic, mercury and antimony in the 21B Zone were often prevented via blending with less deleterious material from other domains, thereby diluting the penalty elements while maintaining a profitable head grade.

14.6 Evaluation of Outliers

Block grade estimates may be overly affected by very high-grade assays therefore; the assay data were evaluated for the high-grade outliers. The outliers were capped on assay data prior to compositing to 1 m intervals.

Capping values were selected on a domain by domain basis using the results from log probability plots, histograms, CV values and metal loss in percent. Less than 1% of the entire assay data set was capped for high-grade outliers. For those assays that were capped, the percent metal loss was highly variable between domains. On average, for the 10 domains combined, less than 10% gold and 15% silver of the total metal was lost during the process of capping, however the results ranged from 3% to 19% for gold and 6% to 40% metal loss for silver. For the domains with percent metal loss more than 15%, the uncapped mean values were sensitive to the extremely high-grade samples.

Table 14-4 shows the gold and silver top cut values, as well as the reduction in mean values and % metal loss within each domain.

Domoin	Tamaut	Assay	Assays Capped		No. out	0/	% metal						
Domain	Topcut	mean	CV	mean	CV	NO. CUT	% cut	loss *					
GOLD g/t													
22	30	1.34	4.50	1.19	2.19	4	0.3%	11%					
21A	90	4.28	3.47	3.97	2.67	58	1.0%	7%					
21C	150	3.39	5.25	3.21	2.49	19	0.1%	5%					
22B	350	10.31	5.24	9.53	3.77	309	0.8%	8%					
22Be	250	9.47	5.37	7.74	3.61	265	1.2%	18%					
21E	50	3.48	2.26	3.37	2.06	31	2.0%	3%					
HW	150	4.65	4.69	4.22	2.94	51	0.2%	9%					
NEX	200	5.16	6.59	4.18	3.68	167	0.5%	19%					
PUMP	80	4.08	3.75	3.69	2.19	30	0.9%	10%					
109	245	11.50	3.82	10.31	2.48	59	0.5%	10%					
							Average	10%					
				SILVER g/t									
22	600	42.49	3.67	36.26	2.45	14	1.0%	15%					
21A	2400	59.02	5.24	55.21	3.71	20	0.3%	6%					
21C	3000	54.95	6.44	50.97	4.28	88	0.3%	7%					
22B	11000	394.97	4.67	354.65	4.16	612	1.5%	10%					
22Be	15000	437.63	5.31	386.95	4.20	266	1.2%	12%					
21E	5000	155.21	4.45	143.85	3.82	19	1.2%	7%					
HW	9000	227.70	6.23	189.38	4.23	104	0.4%	17%					
NEX	10000	203.58	8.47	148.69	5.93	223	0.6%	27%					
PUMP	3000	83.13	5.96	71.85	3.46	24	0.7%	14%					
109	200	22.47	7.96	13.51	1.97	74	0.7%	40%					
							Average	15%					

 Table 14-4: Gold and silver assay capped grades

* % metal loss is (mean – meanCap)/mean*100 where *mean* is the average grade of the declustered assays before capping and *meanCap* is the average grade of declustered assays after capping.

14.7 Compositing

To minimize any bias introduced by variable sample lengths, the assays were composited to 1 m lengths honouring the relevant mineralization domain boundaries. The proposed block size and original sample length were all taken into consideration when selecting the ideal composite length.

Almost all the assay samples inside the mineralization domains were collected at approximately 1 m and shorter intervals (Figure 14-6).



Figure 14-6: Histogram and statistics of assay sample lengths at Eskay Creek

Composite lengths that fell short of 1 m were divided equally amongst intervals in the same domain. The resulting average composite length is 1.0 m, with a minimum length of 0.88 m and a maximum sample length of 1.05 m.

The total number of composites created is 170,167 representing 169,527 m of core. A total of 4,303 m within the domains is unsampled. All gold and silver unsampled intervals were given a default value of 0.001 g/t during compositing. Missing samples due to lost core, voids or insufficient sample were ignored.

The composites were assigned block codes on a majority basis corresponding to the mineralized domain in which they occur. The compositing and domain coding processes were viewed in 3D to ensure that coding had been applied correctly.

Domoin		Assays capped		1m composites		
Domain	No.	Mean.	CV	No.	Mean	CV
			GOLD g/t			
22	1,452	1.28	2.15	1,827	1.23	1.94
21A	5,968	4.60	2.66	6,827	4.05	2.59
21C	29,603	4.07	2.28	27,716	3.84	2.05
22B	40,601	13.63	3.26	38,963	12.71	3.24
22Be	22,368	11.07	3.11	21,125	10.02	3.00
21E	1,554	4.55	2.03	1,476	3.93	1.89
HW	27,135	4.91	2.65	25,110	4.44	2.41
NEX	35,313	5.15	3.40	32,618	4.73	3.14
PUMP	3,416	5.95	1.98	3,323	5.63	1.88
109	11,359	10.95	2.44	11,182	10.03	2.27
TOTAL	178,769			170,167		
			SILVER g/t			
22	1,452	41.61	2.28	1,827	40.49	2.12
21A	5,968	61.66	3.57	6,827	57.16	3.26
21C	29,602	58.22	4.12	27,716	54.10	3.72
22B	40,601	536.27	3.45	38,963	497.71	3.43
22Be	22,368	632.19	3.51	21,125	557.51	3.39
21E	1,554	200.83	3.61	1,476	169.11	3.31
HW	27,135	218.90	3.81	25,110	193.83	3.52
NEX	35,312	189.06	5.28	32,618	164.33	5.11
PUMP	3,416	125.55	2.88	3,323	118.90	2.67
109	11,352	12.74	1.91	11,182	11.55	1.94
TOTAL	178,760			170,167		

Table 14-5:	Comparison	of capped	assav data	to 1 n	n composites
	Companson	or capped	assay uala	10 1 11	i composites

14.8 Variography

Variography was used to assess grade continuity and spatial variability in the estimation domains and to determine sample search distances and kriging parameters for block grade estimation.

After completing the variogram map analysis for each estimation domain, experimental semivariograms were calculated along strike, down-dip and across strike orientations. Downhole variograms were calculated to characterize the nugget effect.

Directional variograms were created for all domains, except for Domains 22 and 21E due to paucity of data. Variogram model rotations were based on the general attitude of the mineralized domains. Variogram models used for determining grade continuity are summarized in Table 14-6 for gold and Table 14-7 for silver. Figure 14-7 shows the Au search ellipsoids used for variography in each domain.

			Go	old			Back transformed
Domain	Structure	Nugget C ₀	Sill C ₁	Major	Semi	Minor	Strike/Plunge /Dip
	1		0.62	10	10	10	
21A	2	0.16	0.12	38	20	15	045/00/-135
	3		0.1	60	30	15	
	1		0.63	7	7	6	
21C	2	0.19	0.11	22	15	11	030/00/-150
	3		0.08	50	50	20	
	1		0.73	10	5	5	
21B	2	0.11	0.14	20	10	10	15/00/-135
	3		0.03	40	20	10	
	1		0.63	7	7	3	
21Be	2	0.14	0.17	20	8	8	340/00/-50
	3		0.07	35	25	10	
	1		0.48	6	5	2	
HW	2	0.17	0.3	20	20	8	45/00/-135
	3		0.06	60	45	15	
	1		0.65	6	5	4	
NEX	2	0.17	0.1	17	15	10	35/00/-135
	3		0.08	35	35	15	
	1		0.66	10	5	4	
PUMP	2	0.06	0.18	15	15	5	335/00/-75
	3		0.11	40	30	10	
	1		0.43	6	5	5	
109	2	0.19	0.32	30	25	25	020/00/-160
	3		0.06	35	25	25	

Table 14-6: variogram parameters for gold by doma

* based on LRL rule

Domain	Structure	Nugget C₀	Sill C ₁	Major	Semi	Minor	Back transformed Strike/Plunge/Dip *
	1		0.73	15	10	5	
21A		0.17					045/00/-135
	2		0.11	60	30	15	
	1		0.54	5	5	5	
21C	2	0.15	0.24	25	20	15	030/00/-150
	3		0.07	60	40	30	
	1		0.76	7	5	5	
21B	2	0.05	0.14	30	15	10	15/00/-135
	3		0.05	50	35	10	
	1		0.69	7	7	3	
21Be	2	0.07	0.15	20	10	10	340/00/-50
	3		0.1	40	30	10	
	1		0.67	15	5	5	
HW	2	0.1	0.13	25	15	10	45/00/-135
	3		0.1	60	50	30	
	1		0.66	5	5	4	
NEX	2	0.09	0.14	15	10	10	35/00/-135
	3		0.08	40	40	15	
	1		0.61	10	5	5	
PUMP	2	0.07	0.25	25	10	10	335/00/-75
	3		0.07	45	40	10	
	1		0.41	5	5	3	
109	2	0.14	0.27	10	10	10	020/00/-160
	3		0.18	30	30	25	

Table 14-7:	Variogram parameters	for silver by domain
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* based on LRL rule



14.9 Dynamic Anisotropy

Due to the folded nature of the Contact Mudstone and resulting mineralization domains, a single search ellipse was not considered practical for the purpose of estimating the mineral resources effectively. Dynamic anisotropy was selected as the preferred method of estimation because it allows each cell in the block model to be adjusted by a vector defined by the presiding mineralization trend within each individual domain.

The search orientation was created using a single surface which followed the base of the Contact Mudstone. Figure 14-8 is an example of how the orientation of the search ellipse varies across the 21A Domain.



Figure 14-8: Oblique section of dynamic anisotropy vectors used in the 21A Domain looking northeast

14.10 Specific Gravity

Specific gravity was determined for 312 samples collected during 1996 and 1997 from the 21B, 21C, 21E, NEX and HW Zones. SG measurements were collected from 10 cm long split or whole diamond drill core. The core was first weighed in air on a beam balance, then weighed in water. The volume of the core was calculated which was then used to calculate the SG.

Due to the limited number of specific gravity measurements taken, an empirical bulk density formula was derived using lead, zinc, copper and antimony grades and verified against the actual measurements. The empirical density equation determined from the historical operator is:

SG = (Pb + Zn + Cu + Sb) * 0.03491 + 2.67 (where all metals are reported in %).

A default of 2.67 was applied to the samples for which the formula could not be used as this was previously determined to be the average SG value of the unmineralized host rocks: rhyolite and mudstone.

A comparison of the calculated specific gravity using the empirical formula versus actual specific gravity measurements is presented below in Figure 14-9.



Figure 14-9: Tested vs calculated SG

Skeena appropriated the empirical density equation from the previous Operator and used it without modification for the 2018 Mineral Resource Estimate. Densities in the block model were derived from the empirical formula based on the estimated metal grades. Lead, zinc, copper and antimony were interpolated into blocks using Inverse Distance Squared methodology (ID²). Composites, search distances and parameters used were the same as those used to estimate gold.

14.11 Block Model and Grade Estimation

The geometrical parameters of the block model used for grade estimation is summarized in Table 14-8.

	Bearing Plunge		Start Offset		End Offset			Block Size				
	Dearing	Flunge	Dip	Х	Y	Z	Х	Y	Z	Х	Y	Z
Parent	90	0	0	9300	8508	260	960	3150	900	3	3	2
sub- block	90	0	0	9300	8508	260	960	3150	900	1	1	1

Table 14-8: Details of block model dimensions and block size

Ordinary Kriging (OK) was used to estimate gold and silver, except for Domains 22 and 21E where ID² interpolation was selected as too few samples were available to derive meaningful variograms. Gold and silver grades within mineralized domains were estimated in three successive passes as outlined in Table 14-9 and Table 14.10. Waste areas outside of the mineralized domains were not estimated.

Table 14-9: Gold grade estimation parameters by domain

Domoin	Counch Door	Estimation	Orientation	G	OLD Search Ra	dii	Number o	Max Samples	
Domain	Search Pass	Туре	Orientation	х	Y	Z	Minimum	Maximum	per drill hole
	1			50	40	10	6	10	2
22	2	ID2	325/45	100	80	20	4	6	2
	3			200	100	40	2	4	2
	1			60	30	15	10	15	2
21A	2	ОК	DA	120	60	30	6	12	2
	3			240	120	60	2	6	2
	1			50	50	20	10	15	2
21C	2	ОК	DA	100	100	40	6	12	2
			200	200	80	2	6	2	
1	1			40	20	10	10	15	2
21B	2	ок	DA	80	40	20	6	12	2
	3			160	80	40	2	6	2
	1			35	25	10	10	15	2
21B2	2	ок	DA	70	50	20	6	12	2
	3	-		140	100	40	2	6	2
	1			50	40	10	6	10	2
21E	2	ID2	DA	100	80	20	4	6	2
	3			200	160	40	2	4	2
	1			60	45	15	10	15	2
HW	2	OK	DA	120	90	30	6	12	2
	3			240	140	60	2	6	2
	1			35	35	15	10	15	2
NEX	2	OK	DA	70	70	30	6	12	2
	3			140	140	60	2	6	2
	1			40	30	10	10	15	2
Pumphouse	2	ОК	335/-75	80	60	20	6	12	2
	3			160	120	40	2	6	2
	1			35	25	25	10	15	2
109	2	ОК	020/-70	70	50	50	6	12	2
	3			140	100	100	2	6	2

* Dynamic Anisotropy (DA) using a structural surface.

Table 14-10:	Silver	grade estimation	parameters	by domain
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Demois Norma	Search	Estimation	on Orientation SILVER Search Radii			Number	of Composites	Max Samples per	
Domain Name	Pass	Туре	Orientation	Х	Y	z	Minimum	Maximum	drill hole
	1			50	40	20	6	10	2
22	2	ID2	325/45	100	80	20	4	6	2
	3			200	100	40	2	4	2
	1			60	30	15	10	15	2
21A	2	ОК	DA	120	60	30	6	12	2
	3			240	120	60	2	6	2
	1			60	40	30	10	15	2
21C	2	ОК	DA	120	80	60	6	12	2
	3			240	160	120	2	6	2
	1			50	35	10	10	15	2
21B	2	ОК	DA	100	70	20	6	12	2
	3			200	140	40	2	6	2
	1			40	30	10	10	15	2
21B2	2	ок	DA	80	60	20	6	12	2
	3			160	120	40	2	6	2
	1			50	40	10	6	10	2
21E	2	ID2	DA	100	80	20	4	6	2
	3			200	160	40	2	4	2
	1			60	50	30	10	15	2
HW	2	ОК	DA	120	100	60	6	12	2
	3			240	200	120	2	6	2
	1			40	40	15	10	15	2
NEX	2	ОК	DA	80	80	30	6	12	2
	3			160	160	60	2	6	2
	1			45	40	10	10	15	2
Pumphouse	2	ОК	335/-75	90	80	20	6	12	2
	3			180	160	40	2	6	2
	1			30	30	25	10	15	2
109	2	ок	020/-70	60	60	50	6	12	2
	3	_		120	120	100	2	6	2

* Dynamic Anisotropy (DA) using a structural surface.

14.12 Model Validation

The results of the modelling process were validated using several methods. These included a thorough visual review of the model grades in relation to the informing drill hole composites, comparisons with other estimation methods, and average grade distribution comparisons using swath plots.

14.12.1 Visual Validation

Detailed visual inspection of the block model were conducted in both cross section and plan view. Figure 14-10 shows a comparison of estimated gold block grades in relation to the gold in drill hole composite data. Overall, the checks show good agreement between composite and estimated block data.





Figure 14-11: Visual validation of block and composite grades on section 10000N looking northeast in the 21A Domain

14.12.2 Comparison of Interpolation Models

An ID² and a nearest neighbour (NN) model were produced to check for local bias in the model.

A summary of the global bias of gold and silver between the ID^{2,} NN, and OK estimation methods for each domain are summarized in Table 14-11. The differences are within acceptable limits.

	Gold g/t										
Domain	Method	AUOK	AUID	AUNN	OK vs ID	OK vs NN					
22 zone	ID2		1.16	1.13	-						
21A	ОК	3.10	3.21	3.18	-3%	-2%					
21C	ОК	2.68	2.69	2.67	0%	0%					
21B	КО	8.23	8.32	8.48	-1%	-3%					
21Be	ОК	8.14	8.26	8.33	-1%	-2%					
21E	ID2		2.86	2.91	-	-					
HW	ОК	3.61	3.68	3.64	-2%	-1%					
NEX	ОК	3.43	3.49	3.40	-2%	1%					
PUMP	ОК	3.51	3.52	3.42	0%	3%					
109	OK	8.77	8.87	8.79	-1%	0%					

Table 14-11	Global bias	check for	dold and	silver by	/ domain
	Olobal blas	CHECK IOI	golu allu	Silver by	uomani

			Silver g/	t		
Domain	Method	AUOK	AUID	AUNN	OK vs ID	OK vs NN
22 zone	ID2		41.2	42.9	-	-
21A	ОК	47.6	49.2	50.5	-3%	-6%
21C	ОК	39.2	39.7	39.3	-1%	0%
21B	КО	307.4	311.5	308.5	-1%	0%
21Be	ОК	398.9	402.3	397.8	-1%	0%
21E	ID2		107.1	107.9	-	-
HW	ОК	158.1	160.6	157.0	-2%	1%
NEX	ОК	104.4	104.3	102.2	0%	2%
PUMP	ОК	71.9	71.1	69.2	1%	4%
109	ОК	11.4	11.4	11.7	0%	-2%

14.12.3 Swath Plots (Drift Analysis)

The model was checked for local trends in the grade estimate using swath plots for each domain. This was done by plotting the mean values from the ID², NN, and declustered composites against the kriged estimate along north-south, east-west and horizontal swaths. The ID², NN and OK models show similar trends in grades with the expected smoothing for each method when compared to the composite data. The observed trends behave as expected, showing no significant bias of the metals in the estimate. An example plot from the 21C Domain is illustrated in Figure 14-12.





Figure 14-12: Swath plot of domain 21C, showing a) Northing b) Easting c) Elevation, and d) histogram distribution

14.13 Mineral Resource Classification

Block model quantities and grade estimates for the Eskay Creek Project were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves by Skeena Resources and reviewed and accepted by Ms. S. Ulansky, PGeo (EGBC#36085) an appropriate independent Qualified Person for the purpose of National Instrument 43-101.

Mineral resource classification is typically a subjective concept. Industry best practices suggest that resource classification should consider the following: 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 all above requirements to delineate regular areas at similar resource classification.

SRK is satisfied that the geological modelling honours the current geological interpretation and knowledge of the deposit. The location of the samples and the assay data are sufficiently reliable to support resource evaluation.

Generally, for mineralization exhibiting good geological continuity investigated at an adequate spacing with reliable sampling information accurately located, SRK considers that blocks estimated during the first estimation run considering full variogram ranges can be classified in the Indicated category within the meaning of the CIM Definition Standards for Mineral Resources and Mineral

Reserves. For those blocks, SRK considers that the level of confidence is sufficient to allow appropriate application of technical and economic parameters to support mine planning and to allow evaluation of the economic viability of the deposit.

Conversely, blocks estimated during the second pass considering search neighbourhoods set at twice the variogram ranges should be 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.

Blocks that were estimated during the third pass remain unclassified.

For coding purposes, all interpolated blocks coded during Pass 1 and Pass 2 were assigned to the Inferred category during the first phase of Classification.

The reclassification to an Indicated category was done for blocks meeting the following conditions:

- Blocks interpolated during Pass 1 using a minimum of 5 holes and a maximum distance of 30 m to a drill hole showing reasonable grade and continuity.
- In areas where blocks were interpolated during Pass 1 but continuity is insufficient or blocks were isolated, the blocks were reclassified to Inferred on a visual basis.

Figure 14-13 shows the distribution of the Indicated and Inferred resources.



14.14 Mineral Resource Statement

CIM Definition Standards for Mineral Resources and Mineral Reserves (May 10, 2014) defines a mineral resource as:

"(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 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 considering extraction scenarios and processing recoveries. To meet this requirement, SRK considers that major portions of the Eskay Creek Project are amenable for Pit extraction or underground mining.

To determine the quantities of material offering "reasonable prospects for economic extraction" by a Pit, SRK used a Pit optimizer and reasonable mining assumptions to evaluate the proportion of the block model (Indicated and Inferred blocks) that could be "reasonably expected" to be mined from a Pit.

The optimization parameters were selected based on experience and benchmarking against similar projects (Table 14-12). The reader is cautioned that the results from the Pit optimization are used solely for testing the "reasonable prospects for economic extraction" by a Pit and do not represent an attempt to estimate mineral reserves. There are no mineral reserves on the Eskay Creek Project. The results are used as a guide to assist in the preparation of a mineral resource statement and to select an appropriate resource reporting cut-off grade.

Table 14-12: Assumptions considered for conceptual open Pit optimization

Parameter	Value	Unit
Overall Pit Wall Angles	45	degrees
Mining Cost	2	US\$ per tonne mined
Processing Cost	15	US\$ per tonne of feed
General and Administrative	5.75	US\$ per tonne of feed
Mining Dilution	5	percent
Mining Recovery	95	percent
Gold Process Recovery	80	percent
Silver Process Recovery	90	percent
Sell Price Gold	1275	US\$ per ounce
Sell Price Silver	17	US\$ per ounce
Sell Cost	30	US\$ per ounce
In Situ Cut-Off-Grade	0.7	grams per tonne
Combined Strip Ratio	2.9 : 1	unitless

The block model quantities and grade estimates were also reviewed to determine the portions of the Eskay Creek Project having "reasonable prospects for economic extraction" from an underground mine, based on parameters summarized in Table 14-13.

Parameter	Value	Unit
Mining costs	79.25	US\$ per tonne mined
Process cost	15	US\$ per tonne of feed
General and Administrative	5.75	US\$ per tonne of feed
Process recovery Au	80	percent
Process recovery Ag	90	tonne feed per year
Sell Price Gold	1275	US\$ per ounce
Sell Price Silver	17	US\$ per ounce
Sell Cost	30	US\$ per ounce

 Table 14-13:
 Assumptions considered for underground resource reporting

The cut-off grade for the open Pit using the parameters presented in Table 14-12 was determined to be 0.7 g/t AuEQ. The underground cut-off grade using the parameters presented in Table 14-13 was determined to be 4.2 g/t AuEQ. At the request of Skeena, the cut-off grades applied for the resource statement were higher; 1.0 g/t for the Pit and 5.5 g/t for the underground resource.

The mineral statement for the Pit constrained resources is presented in Table 14-14 and the mineral statement for the underground resources is presented in Table 14-15. The reported underground resources are exclusive of the resources reported in the conceptual pit shell. In addition, all potential resources that occur within three meters of any historical workings were excluded from the reported resource. Figure 14-15 shows the Pit constrained resources at a 1.0 g/t AuEQ cut-off. Figure 14-15 shows the remaining underground resources above the 5.5 g/t AuEQ outside the 3 m buffered historical workings, exclusive of the Pit constrained resource.

Table 14-14:	Pit constrained* M	lineral Resource	Statement repo	rted at a 1.0	a/t AuFQ c	ut-off grade
			otatement repo	1100 at a 1.0 g	קיו הטבע ט	ut-on graue

				Grade		Contained Ounces			
	Zone	Tonnes (000)	AuEQ (g/t)	Au (g/t)	Ag (g/t)	AuEQ Ounces (000)	Au Ounces (000)	Ag Ounces (000)	
INDICATED	21A	1,088	5.9	4.9	72	207	173	2,533	
INFERRED	21A	2,809	4.6	3.8	63	418	342	5,653	
INFERRED	22	1,452	3.7	2.5	89	171	116	4,151	
TOTAL INDICATED		1,088	5.9	4.9	72	207	173	2,533	
TOTAL INFERRED		4,261	4.3	3.3	72	589	458	9,805	

				Grade		Contained Ounces			
	Zone	Tonnes (000)	AuEQ (g/t)	Au (g/t)	Ag (g/t)	AuEQ Ounces (000)	Au Ounces (000)	Ag Ounces (000)	
INDICATED	21C	674	9.6	7.5	154	207	163	3,335	
INDICATED	21B	338	12.1	8.6	263	132	94	2,855	
INDICATED	21BE	246	10.1	6.8	247	80	53	1,954	
INDICATED	21E	41	10.8	6.3	337	14	8	441	
INDICATED	HW	522	10.2	6.2	295	171	105	4,957	
INDICATED	NEX	510	9.6	6.8	209	158	112	3,432	
INDICATED	PUMPHOUSE	72	7.9	6.1	140	18	14	323	
INDICATED	109	111	9.5	9.4	12	34	34	42	
TOTAL INDICATED		2,513	10.1	7.2	215	814	582	17,340	
INFERRED	21C	44	7.2	6.7	38	10	10	55	
INFERRED	21B	262	10.5	7.8	206	89	66	1,738	
INFERRED	21BE	114	15.3	9.5	431	56	35	1,573	
INFERRED	21E	53	8.5	4.6	292	14	8	495	
INFERRED	HW	87	8.4	5	256	24	14	718	
INFERRED	NEX	220	8.5	6.8	130	61	48	922	
INFERRED	PUMPHOUSE	30	7.8	6.6	92	8	6	88	
INFERRED	109	2	7.4	7.3	8	0.4	0.4	0.4	
TOTAL		812	10	7.2	214	261	187	5,590	

Table 14-15: Underground Mineral Resource Statement reported at a 5.5 g/t AuEQ cut-off grade

* Notes to accompany the Mineral Resource Estimate statement:

- These mineral resources are not mineral reserves as they do not have demonstrated economic viability. Results are reported in-situ and undiluted and are considered to have reasonable prospects for economic extraction.
- As defined by NI 43-101, the Independent and Qualified Person is Ms. S Ulansky, PGeo of SRK Consulting (Canada) who has reviewed and validated the Mineral Resource Estimate.
- The effective date of the Mineral Resource Estimate is July 6, 2018.
- The number of metric tonnes and ounces were rounded to the nearest thousand. Any discrepancies in the totals are due to rounding.
- Pit constrained Mineral Resources are reported in relation to a conceptual Pit shell.
- Reported underground resources are exclusive of the resources reported within the conceptual Pit shell.
- Block tonnage was estimated from volumes using a density formula that applied using interpolated Pb, Zn, Cu, and Sb. This density formula was derived from the historical operator.
 SG = (Pb + An + Cu + Sb) * 0.03491 + 2.67 (where all metals are reported in %)
- All composites have been capped where appropriate.
- Pit mineral resources are reported at a cut-off grade of 1 g/t AuEQ and underground mineral resources are reported at a cut-off grade of 5.5 g/t AuEQ.
- Cut-off grades are based on a price of US\$1275 per ounce of gold, US\$17 per ounce silver, and gold recoveries of 8%, silver recoveries of 90% without considering revenues from other metals. AuEQ = Au (g/t) + (Ag (g/t)/75)
- Estimates use metric units (meters, tonnes and g/t). Metals are reported in troy ounces (metric tonne * grade / 31.10348)
- CIM definitions were followed for the classification of mineral resources.
- Neither the company nor SRK is aware of any known environmental, permitted, legal, titlerelated, taxation, socio-political, marketing or other relevant issue that could materially affect this mineral resource estimate.





14.15 Grade Sensitivity Analysis

The mineral resources of the Eskay Creek Project are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global block model quantities and grade estimates within the conceptual Pit and for the underground resource are presented in Table 14-16 at different cut-off grades. The reader is cautioned that the figures presented in this table should not be misconstrued with a Mineral Resource Statement apart from the official scenarios at 1.0 g/t and 5.5 g/t AuEQ. The tables are only presented to show the sensitivity of the block model estimates to the selection of a cut-off grade.

	COG	Tonnes (000)	AuEQ (g/t)	Au (g/t)	Ag (g/t)	AuEQ Ounces (000)	Au Ounces (000)	Ag Ounces (000)	
INDICATED CATEGORY									
OPEN PIT	> 0.75	1,167	5.6	4.7	68	209	175	2,568	
	> 1.00	1,088	5.9	4.9	72	207	173	2,533	
	> 1.25	1,005	6.3	5.3	77	204	171	2,482	
UG	> 4.00	4,008	8.1	5.9	162	1,038	758	20,878	
	> 4.50	3,414	8.7	6.3	181	957	693	19,872	
	> 5.00	2,923	9.4	6.8	198	883	635	18,576	
	> 5.50	2,513	10.1	7.2	215	814	582	17,339	
	> 6.00	2,171	10.7	7.7	232	750	534	16,192	
INFERRED CATEGORY									
OPEN PIT	> 0.75	4,866	3.9	3	64	606	473	10,026	
	> 1.00	4,261	4.3	3.3	72	589	458	9,805	
	> 1.25	3,731	4.8	3.7	79	570	443	9,519	
UG	> 4.00	1,682	7.4	5.4	142	398	291	7,702	
	> 4.50	1,262	8.2	6	166	333	243	6,736	
	> 5.00	1,004	9.1	6.6	189	294	212	6,115	
	> 5.50	812	10	7.2	214	261	187	5,590	
	> 6.00	661	11	7.8	242	233	165	5,133	

 Table 14-16: Block model quantities and grade estimates for the Pit constrained resource and underground resource at the Eskay Creek Project using variable cut-off grades

• The reader is cautioned that the figures in this table should not be misconstrued with a Mineral Resource Statement. The figures are only presented to show the sensitivity of the block model estimates to the selection of cut-off grade.

15 Adjacent Properties

Notable third-party properties in the Iskut River region are summarized in Table 15-1. Adjacent properties to the Eskay Creek Project are shown in Figure 15-1. The information listed has been taken from documents readily available on the respective company websites and BC MINFILE. Although the information below was publicly disclosed by the Owner or Operator of the adjacent properties, the QP has not audited the associated technical data and the information is not necessarily indicative of the mineralization on the Property that is the subject of this Technical Report.

Project	Owner/Operator	Status	Year	Classification	Cut-off Grade	Tonnes (000)	Average Grades				
Name							Au (g/t)	Ag (g/t)	Cu (%)	Mo (%)	Source
Brucejack	Pretium Resources Inc.	In Production	2016	Proven & Probable	\$180/t	15.6	16.1	11.1	-	-	Ireland et al., (2014)
KSM	Seabridge Gold Inc.	Development Project	2016	Proven & Probable	\$9/t	2,198	0.55	2.6	0.21	42.6	Ghaffari et al., (2016)
Galore Creek	Teck Resources Ltd./NOVAGOLD Resources Inc. JV	Development Project	2011	Proven & Probable	\$11.96/t	528	0.32	6.02	0.59	-	Gill et al., (2011)
Schaft Creek	Teck Resources Ltd./Copper Fox Metals Inc. JV	Development Project	2013	Proven & Probable	\$6.6/t	940.8	0.19	1.72	0.27	0.018	Farah et al., (2013)
Red Mountain	IDM Mining Ltd.	Development Project	2018	Measured & Indicated	3.00 g/t Au	2.771	7.91	22.75	-	-	Doerksen et al., (2017)
Project Name Owner/Opera		Status	Production Years	Million Tonnes	Hi	storical Pr	oduction		Δ.,	٨٩	
	Owner/Operator				Au (g/t)	Ag (g/t)	Cu (%)	Mo (%)	(Moz)	(Moz)	
Snip	Skeena Resources Ltd.	Past Producer, Exploration	1991-1999	1.308	24.53	9.31	0.02	-	1.03	0.39	BC MINFILE (2018)
Johnny Mountain	Seabridge Gold Inc.	Past Producer, Exploration	1988-1990, 1993	0.227	12.38	19.14	0.44	-	0.09	0.14	BC MINFILE (2018)
PROJECT NAME	Owner/Operator	Status	Comments								
E&L	Garibaldi Resources Inc.	Exploration	Significant exploration interest in 2017 on reports of nickel sulphide mineralization intersected in 14 drill holes. Geophysics and follow-up drilling planned for 2018.								Company website
KSP	Colorado Resources Ltd.	Exploration	308 km ² land package targeting porphyry Cu-Au and mesothermal Au veins; 11,824 m drilling completed in 2017; 4,500 m drilling planned for 2018.								Company website
Corey	Eskay Mining Corp.	Exploration	2018 exploration work will consist of airborne geophysics and ground based follow up programs targeting similar mineralization as encountered on Garibaldi's adjacent E & L property.							Company website	
Treaty Creek	Tudor Gold Corp./American Creek Resources Ltd./Teuton Resources Corp.	Exploration	Work in 2017 consisted of 13,722 m drilling to define the Copper Belle target; future work will to focus on expanding the footprint of the mineralized system, understand what kind of system is present and work towards a preliminary resource assessment.							Company website	
Kirkham	Metallis Resources Inc.	Exploration	Recent airborne VTEM airborne geophysical survey and follow-up work in 2018 to focus on evaluating potential for VMS, shear vein hosted, porphyry and magmatic nickel sulphide mineralization.							Company website	
SIB	Eskay Mining Corp./SSR Mining Inc.	Exploration	12 drill holes completed in 2017 apparently confirmed similar stratigraphic units as those which host the Eskay Creek deposit, located approximately 8 km along strike to the northeast. Additional drilling will be completed in 2018. SSR Mining is to spend \$11.7 M in exploration expenditures to earn a 51% interest in the property.							Company website	

Table 15-1: Summary table of notable third-party properties in the Iskut River region



16 Other Relevant Data and Information

There is no other relevant data available about the Eskay Creek Project.

17 Interpretation and Conclusions

The objective of SRK's scope of work was to perform a review of the Resource Estimate for the Eskay Creek Project and validate the results. This technical report and the Mineral Resources presented herein meet these objectives.

17.1 Mineral Tenure, Surface Rights, Agreements, and Royalties

The information provided by Skeena supports the conclusion that the mining tenure held is valid.

17.2 Geology and Mineralization

- The Eskay Creek deposit is a precious and base metal-rich VMS deposit, hosted in volcanic and sedimentary rocks of the Lower to Middle Jurassic Hazelton Group. Mineralization is contained in several stratiform, disseminated and stock work vein zones that display a wide variety of textural and mineralogical characteristics. In addition to extremely high precious metal grades, Eskay Creek is distinguished from conventional VMS deposits by its association with elements of the 'epithermal suite' (Sb-Hg-As) and the dominance of clastic sulphides and sulfosalts.
- The understanding of the regional geology, lithological and structural controls of the mineralization on the Eskay Creek Project are sufficient to support estimation of Mineral Resources.

17.3 Exploration, Drilling and Data Analysis

- A considerable amount of surface and underground drilling has been completed on the property by various companies since the 1930s. No historical drill core remains for any zones at Eskay Creek. Skeena compiled and reviewed the available historical data to build a validated database to support the current Mineral Resource Estimate. This database includes 7,583 drill holes totalling 651,332 meters.
- The quantity and quality of the lithological, collar and down-the-hole survey data collected are sufficient to support Mineral Resources. Sample data density and distribution is adequate enough to build meaningful litho-structural models reflective of the overall deposit type.
- SRK reviewed the database and is of the opinion that historical sample preparation, security
 and analytical procedures met industry-standard practices. SRK also believes that the Skeena
 validated database is of a standard that is acceptable for creating an unbiased, representative
 Mineral Resource Estimate of the Eskay Creek deposit.
- SRK reviewed the analytical quality control data accumulated for the Eskay Creek deposit between 1997 and 2004. An analysis of the historical QAQC programs confirmed that sample bias was negligible. SRK confirms that gold and silver grades are reasonably well reproduced and reliable for resource estimation purposes.

17.4 Metallurgy

Page 141

- Recovery percent for gold and silver, per mining area, has been obtained directly from reports by the previous Operator written during their active phase of mining. These recovery factors have been applied into the Mineral Resource Estimate by Skeena and are considered acceptable and appropriate.
- The 21A and 21B zones, which are both hosted within the Contact Mudstone unit and are geologically and geochemically equivalent, contain high concentrations of arsenic, mercury and antimony. The 21B Zone accounted for the bulk of mineralization historically mined at Eskay Creek, whereas the 21A Zone remains unmined. In the 21B Zone, smelter penalties were often prevented by blending ore with a concentrated sulfosalt assemblage with ore having lower concentrations. This allowed the mine to maintain profitable head grades meanwhile diluting the penalty elements. Deleterious elements are of little significance outside the 21A and 21B Zones. Significant unmined mineralization exists in the 21C and Pumphouse Zones, which contain low levels of arsenic, mercury and antimony; here mineralization occurs in proximal feeder structures in the footwall rhyolite.
- Despite the substantial precious metal grades and potential base metal credits of the 21A Zone
 it was historically uneconomic to mine. High smelter penalties and prevailing low commodity
 prices were factors that halted mining ambitions. In addition, antimony was treated as a penalty
 element which contributed to the unfavourable economics of the 21A Zone at the time;
 however, market conditions have changed since then and there is now the potential to offer
 antimony by-product credits.
- The Phase I drilling program currently underway in the 21A, 21C and 22 Zones will collect core for metallurgical characterization and testing.

17.5 Mineral Resource Estimation

- The Mineral Resource estimation was performed for the primary commodities of interest: gold and silver. Lead, copper, zinc and antimony are potentially valuable by-products worth incorporating into future Mineral Resource estimates. Including base metals and antimony into the mineral inventory will require a complete re-assessment of the estimation domains, as well as favourable up-to-date metallurgical results.
- Block tonnage was estimated using the density formula that was applied using estimated lead, zinc, copper and antimony grades. Skeena is currently re-evaluating the specific gravity in the Phase 1 drilling program.
- SRK considers mineralization at the Eskay Creek Project to have reasonable prospects for economic extraction, in both open Pit zones (21A and 22) and the remaining underground zones (21B, 21Be, 21C, 21E, HW, NEX, Pumphouse and 109). Underground resources occur immediately adjacent to or within 100 m of existing underground infrastructure and, although all historical drift and fill stopes have been backfilled, any potential resources that occur within three meters of any historical working were excluded from the reported resource.

- The calculated Pit constrained cut-off grade was determined to be 0.7 g/t AuEQ and the underground cut-off grade was determined to be 4.1 g/t AuEQ, where AuEQ = Au (g/t) + [Ag (g/t)/75]. At the request of Skeena, the resources are reported at a higher cut-off grade to be conservative.
- At a 1.0 g/t Au cut-off, the Pit constrained resource is estimated to contain an Indicated Mineral Resource of 1,088,000 tonnes at a grade of 5.9 g/t AuEQ for 207,000 oz AuEQ plus an Inferred Mineral Resource estimated at 4,261,000 tonnes at a grade of 4.3 g/t AuEQ for 589,000 AuEQ oz.
- At a 5.5 g/t Au cut-off, the underground resource is estimated to contain an Indicated Mineral Resource of 2,513,000 tonnes at a grade of 10.1 g/t AuEQ for 814,000 oz AuEQ plus Inferred Mineral Resources estimated at 812,000 tonnes at a grade of 10.0 g/t AuEQ for 261,000 AuEQ oz.
- In the open Pit constrained resource approximately three quarters of the contained metal at a 1.0 g/t Au cut-off grade is classified as Inferred. It is reasonable to expect that the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued drilling.

18 Recommendations

The following recommendations provide a framework for future drilling and improved geology and resource models:

- Increase litho-structural snapping tolerances so that subsequent estimation domains are linked at the relevant drill hole interval level.
- Consider the rationale of including base metals or antimony into future Resource Models and re-domain accordingly.
- Future Resource Models should consider base metals as spatially unique with variograms created for each element.
- Future Resource Models should consider deleterious metals as spatially unique with variograms created for each element.
- Continued validation of historical mining processes and procedures are necessary to develop the project further. These include:
 - Dewater (where necessary) and re-survey a portion of the underground workings to qualify the extent of the depletion buffer zone.
- Continue to collect SG samples within different lithology types and grade ranges to refine the density model.
- Assess the metallurgy of the deposit, in particular the 21A and 21B Zones, to ascertain and gauge economic risk due to the high levels of penalty elements.
- An improved final topography surface is necessary for further studies.
- Continue to update and improve the geological interpretations (lithology, alteration and structure) as more data and project understanding becomes available.
- Additional review of high-grade capping values in future resource models as capping may have been too severe in some zones due to the high percent metal loss. Reconsider sub-domaining if the populations do not maintain stationarity.
- In future Resource Models, reduce the minimum number of samples from 5 to 3 in the first pass (approximately equal to Indicated) and 3 to 2 in the second pass (approximately equal to Inferred).
- Re-assess the classification criteria in the Pit in future Resource Models and consider relaxing the criteria to reflect the easier Pit mining method over underground mining.
- Continue to explore for data and documents by the previous Operator with the intention of conducting a thorough reconciliation review of mined material.
- Extensive metallurgical testing for assessment of gold and silver recoveries in the different zones.
• Initiate and maintain a rigorous QAQC program in current and future drilling campaigns.

19 References

- Anderson, R.G. 1989: A Stratigraphic, Plutonic, and Structural Framework for the Iskut River Map Area, Northwestern British Columbia; Current Research, Part E, GSC Paper 89-1E, pp. 145-154.
- Barrick, 2005: Eskay Creek Mine Technical Report on Ore Reserves as at December 27, 2004, internal company report, 148 p.
- Barrick, 2007: Eskay Creek Mine Technical Report on Ore Reserves as at December 27, 2006, internal company report, 82 p.
- Bartsch, R.D. 1993: Volcanic stratigraphy and lithogeochemistry of the Lower Jurassic Hazelton Group, host to the Eskay Creek precious and base metal volcanogenic deposit; Unpublished M.Sc. thesis, Vancouver, University of British Columbia, pp. 178.
- B.C. Ministry of Forests. 1988. Biogeoclimatic zones of British Columbia, 1988. Map, 1:2,000,000.
- Childe, F.C. 1996: U-Pb geochronology and Nd and Pb isotope characteristics of the Au-Ag-rich Eskay Creek VMS deposit, northwestern British Columbia; Economic Geology, V. 91, pp. 1209-1224.
- Doerksen, G., McLeod, K., Makarenko, M., Arseneau, G., Hamilton, A., Embree, K., Sexsmith, K., Murphy, B. 2017: NI 43-101 Feasibility Study Technical Report for the Red Mountain Project British Columbia, Canada; Prepared for IDM Mining Ltd. By JDS Energy & Mining Inc. and others, pp. 353.
- Edmunds, F.C., and Kuran, D.L. 1992: The 1992 exploration program: geological and diamond drilling results; Internal report for International Corona Corporation, Vancouver, British Columbia, pp. 27.
- Edmunds, F.C., Kuran, D.L., and Rye, K.A. 1994: The geology of the 21 Zone deposits at Eskay Creek northwestern British Columbia, Canada; Black Hills Fifth Western Regional Conference of Precious Metals, Coal and the Environment, pp. 154-175.
- Ettlinger, A.D. 1992: Hydrothermal alteration and brecciation underlying the Eskay Creek polymetallic massive sulphide deposit; Geological Fieldwork 1991, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1992-1, pp. 535-541.
- EC (Environment Canada). 2013b. Climate Data Online. Canada's National Climate Archive. http://www.climate.weatheroffice.gc.ca/climateData/canada_e.html.
- Evenchick, C.A. 1991: Structural relationships of the Skeena fold belt west of the Bowser Basin, northwest British Columbia; Canadian Journal of Earth Sciences, V. 28, pp. 535-541.

- Farah, A., Friedman, D., Yang, D.Y., Pow, D.J., Trout, G., Ghaffari, H., Stoyko, H.W., Huang, J., Karrei, L.I., Danon-Schaffer, M., Morrison, R.S., Adanjo, R., Hafez, S.A. 2013: Feasibility Study on the Schaft Creek Project, BC, Canada; Prepared for Copper Fox Metals Inc. by Tetra Tech, pp. 604.
- Gale, D., Mann, R.K., MacNeil, K.D., Stewart, M., Newton, A., Chastain, E. 2004; The 2004 Eskay Creek Exploration Program; Internal report for Barrick Gold Inc., Vancouver, British Columbia, pp. 190.
- Ghaffari, H., Huang, J., Jones, K., Gray, J.H., Hammett, R., Parolin, R.W., Kinakin, D., Lechner, M.J., Parkinson, J.G., Pelletier, P., Brazier, N., Allard, S., Lipiec, T. and Ramirez, M. 2016: 2016 KSM (Kerr-Sulphurets-Mitchell) Prefeasibility Study Update and Preliminary Economic Assessment; NI 43-101 Prepared for Seabridge Gold, Inc. by Tetra Tech and others, pp. 921.
- Gill, R., Kulla, G., Wortman, G., Melnyk, J., Rogers, D. 2011: Galore Creek Project, NI 43-101 Technical Report on Pre-Feasibility Study. Prepared for NovaGold Resources Inc. by Amec, pp. 380.
- Hallam Knight Piesold Ltd. 1993: Application for a Mine Development Certificate, Eskay Creek Project.
- Ireland, D., Olssen, L., Huang, J., Pelletier, P., Weatherly, H., Stoyko, H.W., Hafez, S.A., Keogh, C., Schmid, C., McAfee, B., Chin, M., Gould, B., Wise, M., Greisman, P., Scott, W.E., Farah, A., Zazzi, G., Crozier, T., Blackmore, S. 2014: Feasibility Study and Technical Report Update on the Brucejack Project, Stewart, BC; Prepared for Pretium Resources Inc. by Tetra Tech and others, pp. 460.
- MacDonald, A.J., Heyden, P. van der, Lefebure, D.V., and Alldrick, D.J. 1992: Geochronology of the Iskut River area – an update (104A and B): Geological Fieldwork 1991, British Columbia Ministry of Energy, Mines and Petroleum Resources, Paper 1992-1, pp. 495-501.
- Macdonald, A.J., Lewis, P.D., Thompson, J.F.H., Nadaraju, G., Bartsch, R.D., Bridge, D.J., Rhys, D.A., Roth, T., Kaip, A., Godwin, C.I., and Sinclair, A.J. 1996: Metallogeny of an Early to Middle Jurassic Arc, Iskut River area, northwestern British Columbia; Economic Geology and the Bulletin of the Society of Economic Geologists, V. 91, pp. 1098-1114.
- McElhanney Consulting Ltd. 2004: Drill hole Survey Eskay Creek Mine Survey Report, p 6.
- Meidinger, D., and J.Pojar. 1991: Ecosystems of British Columbia, B.C Ministry of Forests Research Branch, Special Report Series; no. 6. Victoria, B.C. 330 pp.
- MDRU, 1992: Metallogenesis of the Iskut River Area, northwestern British Columbia; Annual Technical Report – Year 2, June 1991 – May 1992, Mineral Deposit Research Unit, University of British Columbia.

- MINFILE (2018): Eskay Creek, 104B 008; BC Ministry of Energy and Mines, MINFILE digital data, posted September 2008, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile Detail.rpt&minfilno=104B++008>.
- MINFILE (2018): Granduc, 104B 021; BC Ministry of Energy and Mines, MINFILE digital data, posted October 2013, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++021>.
- MINFILE (2018): Johnny Mountain, 104B 107; BC Ministry of Energy and Mines, MINFILE digital data, posted October 2012, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++107>.
- MINFILE (2018): Kerr, 104B 191; BC Ministry of Energy and Mines, MINFILE digital data, posted December 2017, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++191>.
- MINFILE (2018): Premier, 104B 054; BC Ministry of Energy and Mines, MINFILE digital data, posted October 2013, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++054>.
- MINFILE (2018): Red Mountain, 103P 086; BC Ministry of Energy and Mines, MINFILE digital data, posted January 2018, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=103P++086>.
- MINFILE (2018): Snip, 104B 004; BC Ministry of Energy and Mines, MINFILE digital data, posted December 1988, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile Detail.rpt&minfilno=104B++004>.
- MINFILE (2018): Valley of the Kings, 104B 199; BC Ministry of Energy and Mines, MINFILE digital data, posted December 2017, URL https://minfile.gov.bc.ca/report.aspx?f=PDF&r=Minfile_Detail.rpt&minfilno=104B++199>.
- Nelson, J., Waldron, J., van Straaten, B., Zagorevski, A., and Rees, C. 2018: Revised Stratigraphy of the Hazelton Group in the Iskut River Region, northwestern British Columbia; Geological Fieldwork 2017, British Columbia Ministry of Energy, Mines and Petroleum Resources, British Columbia Geological Survey Paper 2018-1, pp. 15-38.
- Roth, T. 1995: Mineralization and facies variations in the Eskay Creek 21 Zone polymetallic sulphide-sulfosalt deposit, northwestern British Columbia; Victoria '95 GAC/MAC Annual Meeting, Final Program with Abstracts, V. 20, pp. A-91.
- Roth, T., Thompson, J.F.H. and Barrett, T.J. 1999: The Precious Metal-Rich Eskay Creek Deposit, Northwestern British Columbia; Reviews in Economic Geology, V. 8, pp. 357-372.

Rubin, C.M., Saleeby, J.B., Cowan, D.S., Brandon, M.T., and McGroder, M.F. 1990: Regionally extensive mid-Cretaceous west-vergent thrust system in the northwestern Cordillera: Implications for Continental Margin Tectonism; Geology, V. 18, pp. 276-280.

20 Date and Signature Page

This technical report was written by the following "Qualified Persons" and contributing authors. The effective date of this technical report is July 6, 2018.

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Marek Nowak, PEng Project Reviewer

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices

Appendix A – Drill holes excluded from the Mineral Resource Estimate

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Removed b	y Barrick				
1249	4069	CA89-200	CA90-394	CA90-566	
2580	4073	CA90-197	CA90-431	CA90-568	
2795	4074	CA90-225	CA90-497	CA90-629	
2815	5035	CA90-242A	CA90-515A	CA90-630	
3729	CA89-170	CA90-349	CA90-564	C96744	
C96775	C96814	C99953	C99955	C99961	
U-51					
Collars susp	ect				
CA90-420	CA90-225	CA90-312	CA90-263		
Duplicate sa	ample numbe	rs and/or ove	rlapping assay	/ intervals	
1494	AD9006	C02-1168X	MR05	AD9006	
1766	AD9008	CA89-126	7119	C02-1148	
1943	ADL9435	CA89-154	7162	KV01	
620865	C01977X	CA90-545	7204		
Drain Holes	;				
DR001	DR015	DR061	DR620	DRAIN1	
DR003	DR016	DR109	DR70	DRAIN2	
DR004	DR018	DR507	DR700	DRAIN3	
DR006	DR042	DR525	DR728	DRAIN4	
DR013	DR044	DR589	DR734		
Excluded Re	egional Holes	South of 8250)N		
C011127	GNC9006	LW9006	LW9126	MR03	P3621
C011128	GNC9015	LW9007	LW9127	MR04	P3622
C011129	GNC9018	LW9008	LW9128	P3402	P3623
C02-1175	GNC9018A	LW9009	LW9129	P3404	P3624
C02-1177	GNC9123	LW9010	LW9130	P3405	P3625
C04-1289	GNC91-24	LW9011	LW9131	P3406	P3626
C04-1290	GNC92-29	LW9012	MP0109X	P3407	P3627
C04-1292	GNC9230	LW9013	MP0110	P3408	P3628
C04-1294	GNC92-31	LW9014	MP02-11	P3409	P3629
C91-706	GNC93-32	LW9115	MP9701	P3410	P3630
C91-707	GNC93-33	1W9116	MP9702	P3411	P3631
C91-708	GNC93-34	1W9117	MP9801X	P3512	P3632
C91-709	GNC9730X	1W9118	MP9803	P3513	P3633
C98925	GNC9835	1W9119	MP9804	P3514	P3634
DR620	GNC9836	1W9120	MP9805	P3515	P3635
GNC9001	1.W9001	1W/9121	MP9806	P3616	P3637
GNC9002	11//9002	1///0122	MP9807	P3617	P3639
	11/0002	11/0122		D2619	
	LW9003	LW0124	MD0900	P3018	SIB09-1
CNC9005	11/10005	11/0125	MP01	P2620	SIB89-10
	EV09003			F 3020	SIB03-11
SID03-12	51890-24	SIB90-40	SID01 E4	SID91-73	SIB91-93
SID09-15	SIB90-25	SIB90-47	SID91-54	SID91-74	SID91-94
SID09-14	SIB90-20	SID90-46	SID91-55	SID91-75	SIB91-95
21889-12	SIB90-27	SIB91-100	21891-20	SIB91-70	SIB91-96
21889-2	SIB90-28	SIB91-101	SIB91-57	SIB91-77	SIB91-97
SIB89-3	SIB90-29	SIB91-102	SIB91-58	SIB91-78	SIB91-98
SIB89-4	SIB90-30	SIB91-103	SIB91-59	SIB91-79	SIB91-99
SIB89-5	SIB90-31	SIB91-104	SIB91-60	SIB91-80	SP9801
SIB89-6	SIB90-32	SIB91-105	SIB91-61	SIB91-81	
SIB89-7	SIB90-33	SIB91-106	SIB91-62	SIB91-82	
21882-8	SIB90-34	SIB91-107	SIB91-63	SIB91-83	
21889-9	SIB90-35	SIB91-108	SIB91-64	SIB91-84	
SIB90-16	SIB90-36	21891-109	SIB91-65	SIB91-85	
SIB90-17	SIB90-37	SIB91-110	SIB91-66	SIB91-86	
SIB90-18	SIB90-38	SIB91-111	SIB91-67	SIB91-87	
SIB90-19	SIB90-39	SIB91-112	SIB91-68	SIB91-88	
SIB90-20	SIB90-40	SIB91-49	SIB91-69	SIB91-89	
SIB90-21	SIB90-41	SIB91-50	SIB91-70	SIB91-90	
SIB90-22	SIB90-44	SIB91-51	SIB91-71	SIB91-91	
SIB90-23	SIB90-45	SIB91-52	SIB91-72	SIB91-92	

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QP CERTIFICATES



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CERTIFICATE OF QUALIFIED PERSON

I, Sheila Ulansky, PGeo, do hereby certify that:

- 1. I am currently employed as a Senior Resource Consultant, with an office at Suite 2200-1066 West Hastings Street, Vancouver, BC, V6E 3X2;
- This certificate applies to the technical report titled "Independent Technical Report for the Eskay Creek Au-Ag Project, Canada", with an effective date of July 6, 2018, (the "Technical Report") prepared for Skeena Resources Ltd. ("the Issuer");
- 3. I am a Professional Geoscientist registered with Engineers & Geoscientist British Columbia (EGBC #36085);
- 4. I have personally inspected the subject project on June 27 and 28, 2018;
- 5. I am responsible for all Section numbers with the exceptions of Sections 14.15 and 14.4 of the Technical Report;
- 6. I am independent of the Issuer and related companies applying all of the tests of the NI 43-101;
- I have had no prior involvement with the property that is the subject of the Technical Report.
- 8. 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. As of the effective date of the Technical Report and the date of this certificate, 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.

Effective Date: July 6, 2018 Signing Date: November 1, 2018

Sheila Ulansky, PGeo

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CERTIFICATE OF QUALIFIED PERSON

I, Dr Ron Uken, Principal Consultant, do hereby certify that:

- 1. I am currently employed as a Principal Consultant (SRK, Vancouver), with an office at Suite 2200-1066 West Hastings Street, Vancouver, BC, V6E 3X2;
- 2. This certificate applies to the technical report titled "Independent Technical Report for the Eskay Creek Au-Ag Project, Canada", with an effective date of July 6, 2018, (the "Technical Report") prepared for Skeena Resources Ltd. ("the Issuer");
- 3. I am a Professional Scientist registered with the South African Council for Natural Scientific Professions (SACNASP#400322/11).
- I have not visited the Eskay Creek site;
- I am responsible for Section number 14.4 of the Technical Report;
- 6. I am independent of the Issuer and related companies applying all of the tests in Section 14.4 of the NI 43-101;
- I have had no prior involvement with the property that is the subject of the Technical Report;
- 8. 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. As of the effective date of the Technical Report and the date of this certificate, 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.

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Ron Uken, Pr.Sci.Nat

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CERTIFICATE OF QUALIFIED PERSON

I, Grant Carlson, PEng, do hereby certify that:

- 1. I am currently employed as a Mining Consultant, with an office at Suite 2200-1066 West Hastings Street, Vancouver, BC, V6E 3X2;
- 2. This certificate applies to the technical report titled "Independent Technical Report for the Eskay Creek Au-Ag Project, Canada", with an effective date of July 6, 2018, (the "Technical Report") prepared for Skeena Resources Ltd. ("the Issuer");
- 3. I am a Professional Engineer registered with Engineers & Geoscientist British Columbia (EGBC #142651);
- 4. I have not visited the Eskay Creek site;
- 5. I am responsible for Section numbers 14.15 of the Technical Report;
- 6. I am independent of the Issuer and related companies applying all of the tests in Section 14.15 of the NI 43-101;
- I have had no prior involvement with the property that is the subject of the Technical Report.
- 8. 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. As of the effective date of the Technical Report and the date of this certificate, 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.

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Grant Carlson, PEng

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