

# Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA

Prepared for:

**Viscount Mining Corp.**



**Prepared by:**

Dr. Gilles Arseneau, P. Geo.



ARSENEAU Consulting Services Inc.

Effective Date: April 15, 2018

Report Date: April 30, 2018

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## Date & Signature Page

This report, entitled Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA (effective as of April 15, 2018), was prepared and signed by the following author:

*Original document signed by:*

"Gilles Arseneau"  
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April 30, 2018  
Date Signed

## Contents

Date & Signature Page .....	ii
Contents.....	iii
Tables.....	vi
Figures .....	vi
<b>1.0 Executive Summary .....</b>	<b>1-1</b>
1.1 Introduction.....	1-1
1.2 Access and Location .....	1-1
1.3 History .....	1-1
1.4 Geology and Mineralization.....	1-2
1.5 Exploration and Drilling .....	1-2
1.6 Mineral Resource Estimate .....	1-3
1.7 Conclusions & Recommendations .....	1-4
<b>2.0 Introduction .....</b>	<b>2-1</b>
2.1 Basis of Technical Report .....	2-1
2.2 Scope of Work.....	2-1
2.3 Qualified Person Responsibilities & Site Inspections.....	2-1
2.4 Site Visits & Inspections .....	2-2
2.5 Units, Currency & Rounding.....	2-2
2.6 Terms of Reference.....	2-2
<b>3.0 Reliance on Other Experts .....</b>	<b>3-1</b>
<b>4.0 Property Description &amp; Location.....</b>	<b>4-1</b>
4.1 Property Description & Location.....	4-1
4.2 Mineral Title.....	4-1
4.3 Knight Option Agreement.....	4-4
4.4 Joint Claim Option Agreement .....	4-5
4.5 Colgate Option Agreement.....	4-6
4.6 The Tezak Option Agreement .....	4-6
4.7 Surface Rights.....	4-7
4.8 Environmental Liabilities & Permitting.....	4-7
<b>5.0 Accessibility, Climate, Local Resources, Infrastructure &amp; Physiography .....</b>	<b>5-9</b>
5.1 Accessibility.....	5-9
5.2 Climate .....	5-9
5.3 Topography, Elevation & Vegetation.....	5-10
5.4 Infrastructure .....	5-10
5.5 Demographics .....	5-10

<b>6.0</b>	<b>History .....</b>	<b>6-11</b>
6.1	Early history.....	6-11
6.2	Recent History .....	6-11
6.3	Historic Mineral Resource Estimates .....	6-13
6.4	Historic Production .....	6-13
<b>7.0</b>	<b>Geological Setting &amp; Mineralization.....</b>	<b>7-1</b>
7.1	Introduction.....	7-1
7.2	Regional Geology .....	7-1
7.3	Local Geology .....	7-2
7.4	Mineralization .....	7-4
<b>8.0</b>	<b>Deposit Type.....</b>	<b>8-6</b>
<b>9.0</b>	<b>Exploration.....</b>	<b>9-7</b>
<b>10.0</b>	<b>Drilling.....</b>	<b>10-8</b>
10.1	Historical Drilling.....	10-8
10.2	Viscount Drilling.....	10-9
<b>11.0</b>	<b>Sample Preparation, Analyses &amp; Security .....</b>	<b>11-18</b>
11.1	Sampling Methods.....	11-18
11.2	Analytical Laboratories .....	11-18
11.3	Sample Preparation & analysis .....	11-19
11.4	Quality Assurance and Quality Control .....	11-19
11.5	Security.....	11-20
11.6	Comments on Section 11 .....	11-21
<b>12.0</b>	<b>Data Verification.....</b>	<b>12-1</b>
12.1	Database Verification .....	12-1
12.2	Site Visit and check samples.....	12-1
12.3	Comments on Section 12 .....	12-2
<b>13.0</b>	<b>Mineral Processing &amp; Metallurgical Testing .....</b>	<b>13-1</b>
<b>14.0</b>	<b>Mineral Resource Estimate.....</b>	<b>14-1</b>
14.1	Introduction.....	14-1
14.2	Resource Estimation Procedures.....	14-1
14.3	Drill Hole Database .....	14-1
14.4	Solid Modelling .....	14-3
14.5	Bulk Density.....	14-4
14.6	Capping of assays.....	14-4
14.7	Composite Statistics.....	14-5
14.8	Spatial Analysis .....	14-6
14.9	Block Model.....	14-6
14.10	Model Validation.....	14-7
14.11	Resource Classification.....	14-10

**Mineral Resource Estimate for the Silver Cliff Property, Custer  
County, Colorado, USA**

---

14.12	Mineral Resource Statement.....	14-10
14.13	Grade Sensitivity Analysis.....	14-12
<b>15.0</b>	<b>Adjacent Properties .....</b>	<b>15-1</b>
<b>16.0</b>	<b>Other Relevant Data &amp; Information .....</b>	<b>16-1</b>
<b>17.0</b>	<b>Interpretations &amp; Conclusions .....</b>	<b>17-1</b>
<b>18.0</b>	<b>Recommendations .....</b>	<b>18-1</b>
<b>19.0</b>	<b>References .....</b>	<b>19-1</b>
<b>20.0</b>	<b>Units of Measure, Abbreviations and Acronyms.....</b>	<b>20-1</b>
20.1	Units of Measure .....	20-1
20.2	Abbreviations and Acronyms.....	20-2

## Tables

Table 1.1 Kate deposit mineral resource statement at 35 g/t silver cut-off, effective April 15, 2018 .....	1-4
Table 4.1 Summary of Joint Claim agreements.....	4-5
Table 5.1 Monthly average temperature and precipitation for Silver Cliff, CO .....	5-9
Table 6.1 Historical mineral resource estimates.....	6-13
Table 10.1 Summary of drilling by year .....	10-8
Table 10.2 Summary of historical drilling by company .....	10-9
Table 10.3 Summary of Viscount drill intersections.....	10-10
Table 12.1 Results of 2017 re-sampling program .....	12-1
Table 14.1 Drill hole in the Kate deposit area.....	14-2
Table 14.2 Drill holes used in Kate grade estimation .....	14-2
Table 14.3 Basic statistical information for all assays in Kate deposit area .....	14-2
Table 14.4 Basic statistical information of silver assays inside mineralized domain.....	14-3
Table 14.5 Comparison of capped and uncapped assay statistics .....	14-5
Table 14.6 Basic statistical information of capped and uncapped composites .....	14-5
Table 14.7 Correlogram parameters used for grade estimation.....	14-6
Table 14.8 Block model parameters for the Kate deposit.....	14-6
Table 14.9 Silver interpolation parameters.....	14-7
Table 14.10 Kate deposit mineral resource statement at 35 g/t silver cut-off, effective April 15, 2018 .....	14-11
Table 18.1 Recommended Work Program .....	18-1
Table 20.1 Units of Measure.....	20-1
Table 20.2 Abbreviations & Acronyms.....	20-2

## Figures

Figure 4.1 Silver Cliff Property location map .....	4-1
Figure 4.2 Claim location map .....	4-3
Figure 4.3 Location of Colgate Patent claim.....	4-6
Figure 4.4 View of quarry on Silver Cliff Joint Claim .....	4-7
Figure 7.1 Regional geology of Colorado .....	7-2
Figure 7.2 Silver Cliff Property geology .....	7-4
Figure 9.1 Viscount geological mapping of Kate deposit area .....	9-7
Figure 10.1 Planview showing drill hole location for Kate deposit area .....	10-10
Figure 10.2 Cross section looking northeast showing Viscount drill holes and outline of Kate deposit .....	10-12
Figure 10.3 Planview showing the outline of the Kate deposit and the location of the Viscount drill holes .....	10-13
Figure 10.4 Comparison of Viscount twin hole with Round Mountain historical hole .....	10-14
Figure 10.5 Comparison of Viscount twin hole with Round Mountain historical hole .....	10-15
Figure 10.6 Comparison of Viscount twin hole with historical core hole .....	10-15
Figure 10.7 Comparison of Viscount twin hole with historical core hole .....	10-16
Figure 10.8 Thompson-Howarth plot comparing Viscount twin holes with historical drill data across entire Kate deposit .....	10-17
Figure 14.1 Planview showing Kate deposit wireframe .....	14-4
Figure 14.2 North-south section at 460450E comparing drill hole composites and estimated block silver grades.....	14-7

**Mineral Resource Estimate for the Silver Cliff Property, Custer  
County, Colorado, USA**

---

Figure 14.3 North-south section at 460575E comparing drill hole composites and estimated silver grades ..... 14-8  
Figure 14.4 East-west Swath plots for silver values ..... 14-9  
Figure 14.5 North-south swath plot for silver values ..... 14-9  
Figure 14.6 Grade tonnage curve for indicated and inferred mineral resources ..... 14-12

**NOTICE**

This report was prepared as a National Instrument 43-101 Technical Report, in accordance with Form 43-101F1, for Viscount Mining Corp. The quality of information, conclusions and estimates contained herein is based on: (i) information available at the time of preparation; (ii) data supplied by outside sources, and (iii) the assumptions, conditions and qualifications set forth in this report.

Viscount Mining Corp. is authorized to file this report as a Technical Report with the Canadian Securities Regulatory Authorities pursuant to provincial securities legislation.

## **1.0 EXECUTIVE SUMMARY**

### **1.1 INTRODUCTION**

Arseneau Consulting Services Inc. (ACS) was retained by Viscount Mining Corp. (Viscount or the Company or VML) to prepare a Mineral Resource Estimate for the Silver Cliff Silver Property located in Custer County, Colorado, immediately north of the town of Silver Cliff. The purpose of this study is to incorporate historical drill results with new drilling information gathered by Viscount to prepare a mineral resource estimate for the Silver Cliff Silver Property.

### **1.2 ACCESS AND LOCATION**

The Silver Cliff Property is situated in south-central Colorado centered at latitude 38°09'N and longitude 105°26'E, 225 kilometres (km) by road south of Denver. The Property lies in the Rocky Mountains of Colorado on a high, broad valley between the central range of the Sangre De Cristo mountains to the west, and the Wet Mountains to the east.

The project site lies immediately north of the town of Silver Cliff and Westcliffe, in the Hardscrabble Mining district of Custer County, Colorado. The Property is readily accessed by road about 80 km west of Pueblo, CO and 50 km south of Canon City, CO. Travel time from Denver, south on US Interstate Highway 25 and then west on State highway 96, a total distance of 225 km, is approximately 2.5 hours.

Mineral titles covering the Silver Cliff Property are complex and comprise of both Patented and Lode Claims. Viscount's right to the property is covered by six separate option agreements, the Knight Living Trust agreement (Knight agreement), the Bailey agreement, the Petersen agreement, the Colgate agreement, the agreement with the town of Silver Cliff and the Tezak agreement. Most of the property is covered by the Knight agreement which covers 85 contiguous lode claims over the property representing approximately 589 hectares (ha). The total area of the property is approximately 720 ha.

### **1.3 HISTORY**

The Silver Cliff discovery was made in June of 1878 when timbermen hauling wood from Sangre de Cristo to Rosita noted blackened cliffs at Silver Cliff and sampled them. They staked the Silver Cliff and Racine Boy claims on which an open pit was later developed. These initial discoveries led to much more extensive prospecting of the areas which resulted in the discovery of several other significant silver occurrences, including the Bull Domingo Mine, developed on a breccia pipe, Plata Verde, Horn Silver, Queen of the Valley, Rambler and Kate.

Congdon and Carey Ltd. (C&G) conducted some original reconnaissance work and geological mapping in the Rosita and Westcliffe areas.

From the 1960's to the mid 1980's C&G, either on their own, or through option and joint venture agreements with other groups, carried out exploration at a number of different levels on a number of different targets on the Silver Cliff Property drilling a total of 397 drill holes totalling 20,442 m.

## **1.4 GEOLOGY AND MINERALIZATION**

Regionally, the rocks surrounding the Silver Cliff area are part of a Precambrian complex of metasedimentary and intrusive rocks that form the basement to the district. The rocks include hornblende gneiss, granite gneiss, pegmatite and migmatite. Northwest striking syenite dykes of Late Precambrian age intrude the older foliated gneisses.

The Silver Cliff and Rosita areas are underlain by two eruptive centres, about 9 kilometres apart, of Oligocene to Miocene age that are at least in part cogenetic and coeval. The contact between the Precambrian rocks and the Tertiary volcanic rocks derived from these centres is partly faulted and unconformable. The Silver Cliff caldera covers an area of approximately 3.2 by 4.0 kilometres.

The Silver Cliff caldera consists of a felsic volcanic pile in excess of 600 metres thick. The upper 90 metres of the pile is extrusive in origin and is composed of mainly flow banded, flow brecciated and spherulitic rhyolites with lenticular bodies of volcanic glass (obsidian), often present near the base of this sequence. The lower rocks are epiclastic and pyroclastic in origin and include tuffs, breccias and conglomerate.

The most intensely investigated mineralization at Silver Cliff has been in the form of secondary silver mineralization locally associated with manganese oxides in the upper, highly fractured rhyolite flows and flow breccias that occur just north of the town of Silver Cliff (Kate Deposit). The silver mineralization is conformable to stratigraphy and can occur from surface to depths varying from 40 to 50 m. Manganese oxide (cryptomelane) occurs with silver bearing chlorides (chlorargyrite), bromides (bromargyrite) and sulphide (acanthite) minerals in breccias as matrix fillings and also as small vuggy zones in the matrix and breccia fragments. In the flow banded rhyolite manganese and silver mineralization occur as veins and partial fracture fillings, perpendicular and parallel to the flow banding. The veins range in thickness from a hairline to approximately 13.0 cm but are more commonly 1.5 cm to 5.0 cm wide.

## **1.5 EXPLORATION AND DRILLING**

In 2016, Viscount carried out a data compilation and a prepared a geological map of the Kate deposit area. Viscount also carried out a preliminary drilling program, drilling nine holes to confirm some of the historical drill results reported by the previous operators. Viscount drilled an additional ten holes in 2017 to further evaluate the Kate deposit and verify the historical drill holes.

In March of 2018, Viscount commissioned MtnCarto of Fraser Colorado to fly an aerial survey over the main Kate deposit area to produce a high-resolution, one metre contour, 3D topographic map of the surface of the deposit.

Most of the drilling on the Silver Cliff Property has been done by various property owners. Viscount has drilled a total of nineteen drill holes in two programs aimed at verifying the historical results. There is a total of 397 historical drill holes in the Viscount database, 285 are in the immediate vicinity of the Kate deposit and 79 holes were drilled on land not currently controlled by Viscount.

Viscount has carried out two drilling campaigns on the Silver Cliff Property to date. Nine holes were drilled in 2016 and ten additional holes were drilled in October of 2017. The drilling programs were targeted at the Kate deposit and primarily aimed at verifying the historical drill results. All holes were drilled by independent contractors supervised by Viscount personnel.

## **1.6 MINERAL RESOURCE ESTIMATE**

The mineral resource model prepared by ACS utilised a total of 133 drill holes, 19 of which were drilled by Viscount in 2016 and 2017. The resource estimation work was completed by Dr. Gilles Arseneau, P. Geo. (APEGBC) an appropriate independent qualified person within the meaning of NI 43-101. The effective date of the Mineral Resource statement is April 15, 2018.

Three-dimensional solid of the Kate mineralization was generated on north-south sections spaced 25 m apart. The wireframe was constructed to bracket all mineralization greater than 15 g/t silver (approximately 0.5 opt). Some lower grade intersections were included to allow for greater deposit continuity and few intervals that were isolated had to be excluded from the wireframe model. All silver grades were capped to 1,000 g/t and composited to 2.5 m prior to estimation.

Mineral resources were estimated by ordinary kriging using Geovia GEMS Version 6.8.1 modelling software into 10 by 10 by 5 m blocks. Bulk densities were coded in the model based on the block rock code. All mineralized blocks were assigned a 2.36 t/m<sup>3</sup> bulk density and all waste blocks were assigned 2.72 t/m<sup>3</sup>.

Blocks were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (the CIM Definition Standards, May 2014). ACS is satisfied that the geological modelling reflects the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation.

ACS considers that blocks estimated during pass one and from at least 4 drill holes could be assigned to the Indicated category. All other estimated blocks were assigned to the Inferred category within the meaning of the CIM Definition Standards.

In order to determine the quantities of material satisfying “reasonable prospects for economic extraction”, ACS assumed a minimum mining cut off of 35 g/t silver representing an approximate mining and processing cost of US\$16 per tonne. The reader is cautioned that there are no mineral reserves at the Silver Cliff Property.

ACS is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political issues that may adversely affect the Mineral Resources presented in this Report.

ACS considers that the blocks with grades above the cut-off grade satisfy the criteria for “reasonable prospects for economic extraction” and can be reported as a Mineral Resource. Mineral resources for the Kate deposit on the Silver Cliff Property are summarized in Table 1.1.

**Table 1.1 Kate deposit mineral resource statement at 35 g/t silver cut-off, effective April 15, 2018**

classification	Tonnes	grade Ag (g/t)	ounces silver
Indicated	2,064,000	84	5,560,900
Inferred	3,172,000	70	7,143,900

- (1) *Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.*
- (2) *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
- (3) *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.*
- (4) *The Mineral Resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*

## **1.7 CONCLUSIONS & RECOMMENDATIONS**

The Kate silver deposit on the Silver Cliff Property, near the town of Silver Cliff Colorado, forms a cohesive near surface, flat lying, silver deposit that could be amenable to open pit mining. The deposit has been explored extensively in the past by various companies with a total of 285 historical drill holes being drilled in the deposit area.

The surface and mineral rights over the deposit are complex and governed by various option agreements signed by Viscount between 2014 and 2018. The effective property area now covers over 900 hectares.

Mineralization at the Kate deposit in the form of secondary silver mineralization locally associated with manganese oxides in the upper, highly fractured Tertiary-age rhyolite flows and flow breccias. The mineralized zones are conformable to stratigraphy and are encountered from surface to depths varying from approximately 40 to 50 m.

Based on the validated historical drill holes and the Viscount drilling, ACS estimated that the Kate deposit on the Silver Cliff Property contained 2.1 million tonnes of indicated mineral resources grading 84 g/t silver and 3.2 million tonnes of inferred mineral resources grading 70 g/t silver. The deposit remains open to the west and possibly to the northeast where only limited drill testing has been conducted in those directions.

## Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA

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ACS recommends that Viscount initiates a metallurgical testing program to determine the potential recovery of silver from the mineralization at the Kate deposit. Contingent on positive results of the metallurgical program, ACS recommends that Viscount carry out a drill program to upgrade the inferred mineral resource to indicated category. A total of 20 holes would be required to convert most of the inferred mineral resource to indicated category. Viscount should then prepare a Preliminary Economic Assessment (PEA) for the Kate deposit.

The total estimated cost of combined phased program is US\$800,000.

## **2.0 INTRODUCTION**

### **2.1 BASIS OF TECHNICAL REPORT**

Arseneau Consulting Services Inc. (ACS) was retained by Viscount Mining Corp. (Viscount) to prepare a Mineral Resource Estimate for the Silver Cliff Property (the Property or the Project) located in Custer County, Colorado, USA. The purpose of this study is to incorporate new drilling information gathered by Viscount with historic drill data in order to classify mineral resources under National Instrument 43-101 (NI43-101).

The Silver Cliff property was optioned from various owners with the intent of conducting exploration work that would result in defining a silver resource for the property.

Since acquiring the Project, Viscount has drilled 19 HQ diamond drill holes over the Kate deposit. Most of the drill holes were twins of historic drill holes on the property.

### **2.2 SCOPE OF WORK**

ACS was requested to prepare a NI43-101 compliant Mineral Resource Estimate for the Silver Cliff silver property, including information from the recent Viscount drilling program.

The ACS scope of work included:

- Compile the technical report including historical data and information provided by other consulting companies
- Carry out a site visit
- Create wireframes of the mineralized zone(s)
- Statistical review of the assay data
- Prepare block model for resource estimation
- Estimate mineral resource by inverse distance square interpolation
- Validate block model resource and classify the mineral resource

### **2.3 QUALIFIED PERSON RESPONSIBILITIES & SITE INSPECTIONS**

Dr. Gilles Arseneau, PhD, P. Geo., of ARSENEAU Consulting Services Inc. is an independent qualified person as the term is defined in NI43-101.

The QP is not an insider, associate, or affiliate of Viscount. The results of this technical report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Viscount and the QP. The QP is being paid a fee for the work in accordance with normal professional consulting practice.

## **2.4 SITE VISITS & INSPECTIONS**

Dr. Arseneau visited the project on September 25<sup>th</sup>, 2017. The site visit included examination of drill core and drill sites, the surface geology, sampled intervals and mineralization. The site access, regional topography and infrastructures were also examined during the site visit.

## **2.5 UNITS, CURRENCY & ROUNDING**

Unless otherwise specified or noted, the units used in this technical report are metric. Every effort has been made to clearly display the appropriate units being used throughout this technical report. Currency is in United States dollars (US\$ or \$) unless otherwise noted.

This report includes technical information that required 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, the QP does not consider them to be material.

## **2.6 TERMS OF REFERENCE**

The function of this report is to document a mineral resource estimate of the Silver Cliff Property. It is a compilation derived from the historical work performed by previous operators from early 1966 to present, and first principles design and estimate work by ACS.

Data used in the compilation were derived from unpublished historical reports listed in the References Section (Section 19.0) of this Report, Viscount press releases from 2016 and 2017, and Viscount audited financial statements obtained from SEDAR.

Sections 6 to 9 of this report draw strongly upon on reports prepared by Fieldman (1966) of Congdon and Carey Ltd., and by Sawyer Consultants Inc. in June 1984 (Sawyer, 1984) on behalf of Pacific Minesearch Ltd.

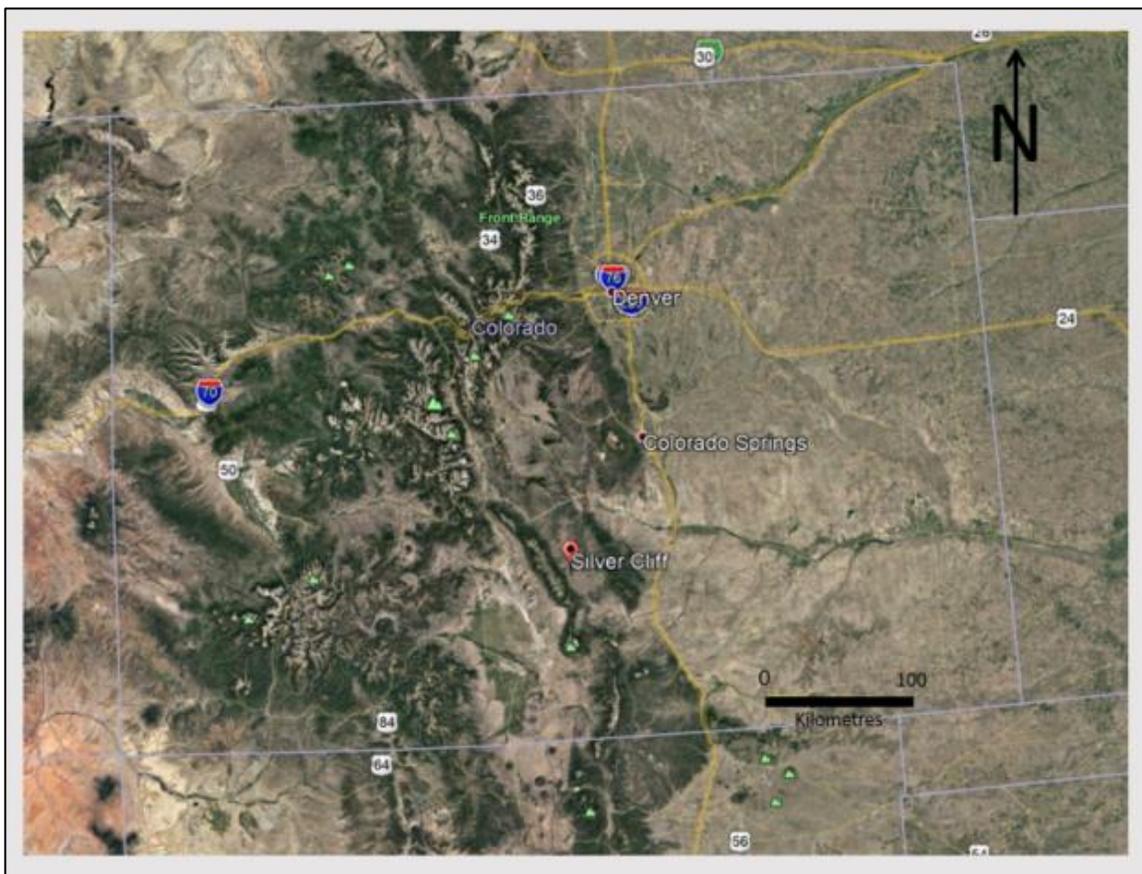
### **3.0 RELIANCE ON OTHER EXPERTS**

ACS has not carried out land surveys. ACS has relied on information provided by Viscount for matters pertaining to claim status and surface land title.

## 4.0 PROPERTY DESCRIPTION & LOCATION

### 4.1 PROPERTY DESCRIPTION & LOCATION

The Silver Cliff Property is situated in south-central Colorado centered at latitude 38°09'N and longitude 105°26'E, 225 kilometres (km) by road south of Denver (Figure 4.1). The project site lies immediately north of the town of Silver Cliff and Westcliffe, in the Hardscrabble Mining district of Custer County, Colorado.



Source: Google Earth 2017

**Figure 4.1 Silver Cliff Property location map**

### 4.2 MINERAL TITLE

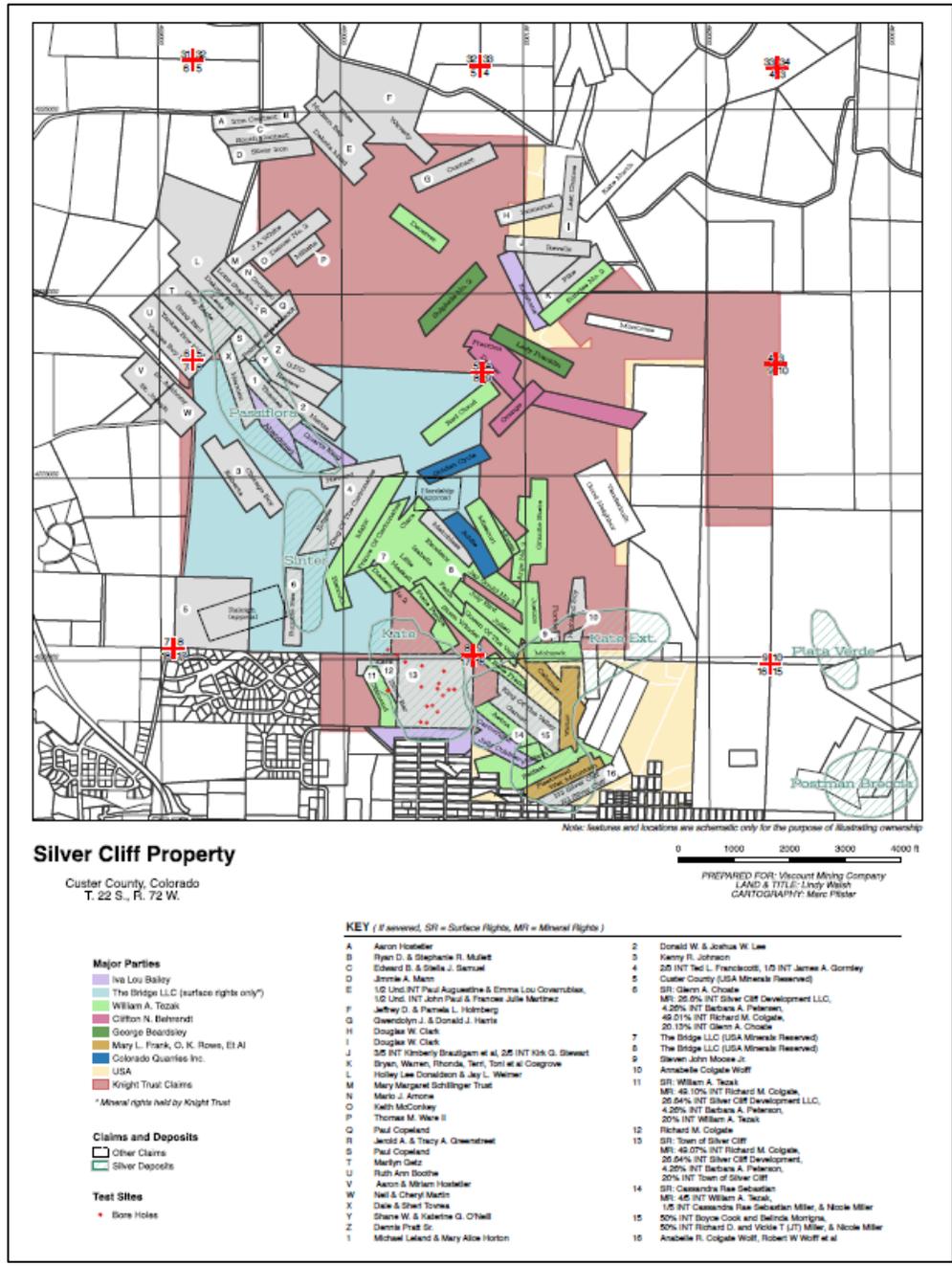
Mineral titles covering the Silver Cliff Property are complex and comprise of both Patented and Lode Claims. Viscount's right to the property is covered by six separate option agreements, the

## Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA

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Knight Living Trust agreement (Knight agreement), the Bailey agreement, the Petersen agreement, the Colgate agreement, the agreement with the town of Silver Cliff and the Tezak agreement. Most of the property is covered by the Knight agreement which covers 85 contiguous lode claims over the property representing approximately 589 hectares (ha). The Bailey, Petersen, Town of Silver Cliff and Colgate agreement pertain to a single 40 acres lot (16 ha) known as the NE $\frac{1}{4}$  of NE  $\frac{1}{4}$  Section 17 lot or the Joint Claims. The Colgate agreement also includes two patented claims partially overlapping with the NE $\frac{1}{4}$  of NE  $\frac{1}{4}$  Section 17 lot covering approximately 3 ha. The total area of the property is approximately 720 ha (excluding overlapping areas) (Figure 4.2).

# Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA



Source: Viscount 2018

Figure 4.2 Claim location map

### **4.3 KNIGHT OPTION AGREEMENT**

Under the terms of the option agreement, dated August 13<sup>th</sup>, 2014, the David C. and Debra J. Knight Living Trust (the Owner) agreed to grant an option to Viscount to acquire an undivided 100% interest in 96 lode claims in the Silver Cliff Property area (85 claims covering the property and 11 RHC claims situated 6 km south east of the Silver Cliff Property (Figure 4.2).

Pursuant to the agreement Viscount agreed to the following:

1. Issuing to the Owner 200,00 shares and 200,000 warrants on the Effective Date, which vest as follows:
  - i. 50,000 shares and warrants on the first anniversary of the Effective date (Issued);
  - ii. 50,000 shares and warrants on the second anniversary of the Effective date (issued);
  - iii. 50,000 shares and warrants on the third anniversary of the Effective date (issued);
  - iv. 50,000 shares and warrants on the fourth anniversary of the Effective date;
2. Making payments on behalf of the Owner of the claim rental fees due to the U.S Bureau of Land Management:
  - i. For the assessment year beginning September 1, 2014 (issued);
  - ii. For 2016, prior to May 1, 2015 (issued):
3. Making payments to the Owner in the aggregate amount of US\$3,000,000 as follows:
  - i. \$15,000 on the second anniversary of the effective date (issued);
  - ii. \$20,000 on the third anniversary of the effective date (issued);
  - iii. \$30,000 on the fourth anniversary of the effective date;
  - iv. \$50,000 on the fifth anniversary of the effective date;
  - v. \$75,000 on the sixth anniversary of the effective date;
  - vi. \$100,000 on the seventh anniversary of the effective date;
  - vii. \$100,000 on the eighth anniversary of the effective date;
  - viii. \$100,000 on the ninth anniversary of the effective date;
  - ix. \$100,000 on the tenth anniversary of the effective date;
  - x. \$150,000 on the eleventh anniversary of the effective date;

- xi. \$200,000 on the twelfth anniversary of the effective date;
  - xii. Paying the remaining outstanding balance of the required US\$3,000,000 plus Cost of Living Increase adjustment on the thirteenth anniversary of the effective date;
4. Royalty payment to the Owner of 2% of the NSR and issuance of an additional 550,000 shares and 550,000 warrants upon the commencement of commercial production.

The NSR is subject to a buy-back right in favor of Viscount at any time prior to commencement of commercial production on any particular deposit, to repurchase 1% of the NSR from the Vendors. The purchase price for such a buy back will be an amount equal to the value of 0.5% of all commercially mineable and proven and probable reserves on the subject deposit determined pursuant to a NI-43-101 compliant Feasibility Study, with the mineral price to be based on the 30-day average price prior to Viscount giving notice of the intended NSR purchase.

The Knight Lode claims partially overlaps patented claims that are not covered under the Knight agreement.

#### **4.4 JOINT CLAIM OPTION AGREEMENT**

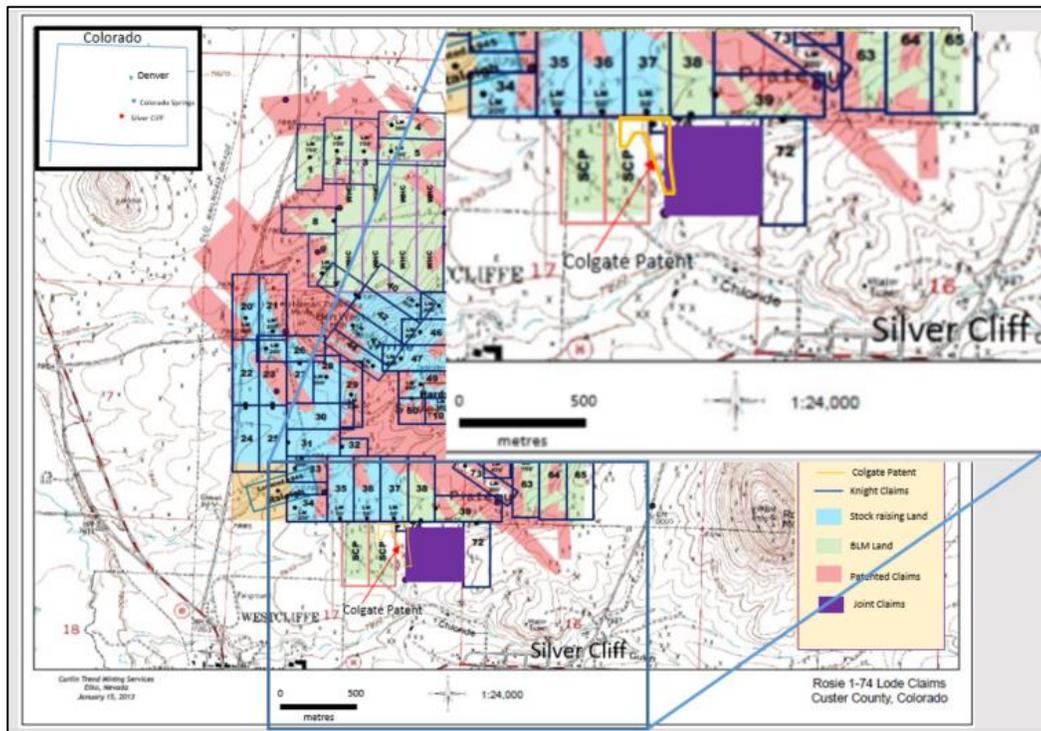
The Joint Claim consists of a single land parcel covering approximately 16 ha situated at the southern end of the Knight claim block (Figure 4.2). The ownership of the Joint Claim is shared by four groups and covered by four separate agreements signed with Viscount in May of 2017. All agreements are very similar and cover prorated payments and commitments as outlined in Table 4.1.

**Table 4.1 Summary of Joint Claim agreements**

Payment Due (US\$)	Owners			
	Bailey	Petersen	Silver Cliff	Colgate
Ownership of Joint Claims (%)	26.64	4.26	20.03	49.07
Upon Execution	\$10,296.00	\$1,704.00	\$11,000.00	\$40,000.00
Year One	\$10,296.00	\$1,704.00	\$11,500.00	\$40,000.00
Year Two	\$15,444.00	\$2,556.00	\$12,000.00	\$40,000.00
Year Three	\$15,444.00	\$2,556.00	\$16,500.00	\$40,000.00
Year Four	\$22,636.80	\$3,363.20	\$21,500.00	\$40,000.00
Year Five	\$25,740.00	\$4,260.00	\$21,500.00	\$40,000.00
Year Six	\$25,740.00	\$4,260.00	\$26,000.00	\$40,000.00
Year Seven	\$38,610.00	\$6,390.00	\$26,500.00	\$40,000.00
Year Eight	\$51,480.00	\$8,520.00	\$47,000.00	\$40,000.00
Year Nine	\$77,760.00	\$12,780.00	\$67,500.00	\$40,000.00
Year Ten	\$102,960.00	\$17,040.00	\$88,000.00	\$1,000,000.00
Retained NSR (%)	0.4	0.0639	0.3	0.736

#### 4.5 COLGATE OPTION AGREEMENT

In addition to the Joint Claims, the Colgate agreement signed on May 12, 2017 between Viscount and Richard Michael Colgate (Colgate) also covers two patented claims 100% owned by Colgate. The patented claims are situated west of the Joint Claims and slightly overlapping the Joint Claims (Figure 4.3). The option payments to Colgate described in Table 4.1 covers both the Joint claims and the patented claims. However, any production from the patented claims is subject to a 1.5% NSR and Viscount also agreed to pay Colgate a US\$ 20,000 per year consulting fee from year one to nine of the agreement (not included in Table 4.1).



Source: Carlin Trend Mining Services 2013 (with modifications)

Figure 4.3 Location of Colgate Patent claim

#### 4.6 THE TEZAK OPTION AGREEMENT

On October 24, 2017, Viscount entered into an agreement with William Tezak thereby optioning 33 lode claims covering 285 acres (115 ha) in the Silver Cliff area, the Tezak Property (Figure 4.2 above). The agreement grants Viscount the right to explore, mine and extract minerals from the Tezak Property with the exception of rhyolite and obsidian. In exchange, Viscount grants to Tezak, pursuant to and conditional upon compliance with the terms of the Knight Option Agreement, the sole and exclusive right to explore, mine and extract rhyolite and obsidian from the Viscount property. Viscount also agrees to grant Tezak a 1% net smelter royalty.

## 4.7 SURFACE RIGHTS

Most of the land on the Viscount property is covered by patented claims, stock raising and homestead land, private land or Bureau of Land Management Land (BLM). The Joint Claims agreement grants access to the NE¼ of NE ¼ Section 17 lot, the Colgate agreement grants access to the Colgate Patented claims, the Tezak agreement grants access to the Tezak patents and Knight agreement grants access to the BLM land but surface access to stock raising or the patented land not covered by the Colgate agreement is restricted and must first be granted by the land owners.

## 4.8 ENVIRONMENTAL LIABILITIES & PERMITTING

### 4.8.1 Environmental Liabilities

There are no known environmental liabilities on the property. The town of Silver Cliff operates a small quarry on the Joint Claims (Figure 4.4). The town is responsible for any environmental issues resulting from the quarrying operation. The remainder of the property is mainly covered by grass and used for grazing.



Source: ACS 2018

**Figure 4.4 View of quarry on Silver Cliff Joint Claim**

#### **4.8.2 Required Permits & Status**

The Colorado Division of Reclamation, Mining and Safety controls all permits for exploration activity on the property. Viscount secured all necessary permits to carry out exploration activity including drilling.

## 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE & PHYSIOGRAPHY

### 5.1 ACCESSIBILITY

The Silver Cliff Property is readily accessed by road. The towns of Silver Cliff and Westcliffe are on State Highway 96 approximately 80 km west of Pueblo, CO and 50 km south of Canon City, CO. Travel time from Denver, south on US Interstate Highway 25 and then west on State highway 96, a total distance of 225 km, is approximately 2.5 hours.

The nearest rail head is at Florence, CO, approximately 60 km away, following state highways 96 east and then 67 north.

Access within the property is excellent via a number of dirt roads.

### 5.2 CLIMATE

Climatic conditions at the Silver Cliff property are dictated primarily by its altitude (~2450 masl) and location in a mountainous environment. Average temperatures, rainfall and snowfall are shown on Table 5.1. In general, winters are cold and relatively long, summers shorter and warm. Average yearly rainfall is approximately 36 cm and snowfall approximately 225 cm, with precipitation spread throughout the year. Average winds are generally light, but steady year-round, at 10 to 15 km per hour.

**Table 5.1 Monthly average temperature and precipitation for Silver Cliff, CO**

Month	Average Low °C	Average High °C	Record Low	Record High	Average Rain cm	Average Snow cm
January	-14°	3°	-40.6° (1971)	18.3° (1950)	1.1	22.1
February	-12°	4°	-42.8° (1951)	22.2° (1975)	1.3	26.4
March	-8°	8°	-29.4° (2002)	22.2° (1971)	3.0	45.7
April	-4°	12°	-27.2° (1959)	25° (1989)	3.5	37.3
May	1°	18°	-13.3° (1956)	31.1° (2002)	3.7	13.7
June	4°	23°	-6.7° (1976)	34.4° (1954)	2.6	0.5
July	7°	26°	-1.1° (1956)	34.4° (1971)	5.5	0
August	7°	25°	-2.2° (1992)	32.8° (1958)	6.0	0
September	2°	22°	-15.6° (1971)	31.7° (1960)	2.8	4.1
October	-3°	16°	-24.4° (1993)	27.8° (1950)	2.5	21.3
November	-9°	8°	-33.9° (1957)	21.7° (1999)	2.4	31.2
December	-14°	3°	-39.4° (1978)	20.6° (1980)	1.5	26.7

Source: [www.intellicast.com](http://www.intellicast.com) and [www.areavibe.com](http://www.areavibe.com)

Although snow may be heavy at times during the winter, weather does not pose a significant operating problem.

### **5.3 TOPOGRAPHY, ELEVATION & VEGETATION**

The Silver Cliff Property lies in the Rocky Mountains of Colorado on a high, broad valley between the central range of the Sangre De Cristo mountains to the west, and the Wet Mountains to the east. It covers part of a plateau, the Silver Cliff plateau, where topography is gentle rolling, and only a few isolated and small hills stand out. Elevations on the property range from 2400 masl to 2650 masl.

As a result of the high elevation vegetation is mainly restricted to grasses and small shrubs, except on the few hills, where small evergreen trees are present.

### **5.4 INFRASTRUCTURE**

The Project is situated about one kilometre north of the town of Silver Cliff. Silver Cliff and Westcliffe, are centrally located adjacent to each other with Westcliffe serving as the County seat.

Local commercial resources are limited but power is available from the local power grid and water can be obtained from wells or from the town's water supply. The towns of Silver Cliff and Westcliffe would likely supply basic services and employment to assist exploration programs or mining operations. Materials and some personnel would need to be drawn for larger nearby population centres such as Pueblo or Denver.

The land controlled by Viscount is relatively small, for the most part, surface rights are not controlled by the property agreements. Surface rights are included in the Joint Claims and Colgate agreements but are exclusive of the quarry lot. Any mining activity on the Silver Cliff property will require the purchase of private land to accommodate any operation.

### **5.5 DEMOGRAPHICS**

#### **5.5.1 Population**

In 1880, when mining was booming, Silver Cliff had a population of 5,040 people, and was the third most populous town in Colorado after Denver and Leadville. By the census of 2000, the population declined to approximately 510 people, and it was estimated in 2016 to host approximately 600 people. Nearby Westcliffe now hosts a population of approximately 500 people.

#### **5.5.2 Economic Activity**

Little information on economics in the area is available, however Silver Cliff and Westcliffe are heavily dependent on ranching and agriculture. More recently, the towns have been promoting local outdoor activities such as hiking and fishing. In general, the local economy is depressed and would benefit strongly from exploration and mining activity.

## **6.0 HISTORY**

### **6.1 EARLY HISTORY**

The first significant mineral discovery in Custer County was made in Rosita, approximately 10 km southeast of Silver Cliff in 1878. The Humboldt- Pocahontas vein was discovered in 1874 and went on to produce a reported \$US 900,000 in gross value (silver, lead, zinc) over a period of 15 years. Three years later the Bassick Mine, a pipe or chimney style deposit was discovered 10 km to the east of Silver Cliff, and reportedly produced \$US2,000,000 up until 1923 (Fieldman, 1966).

The Silver Cliff discovery was made in June of 1878 when timbermen hauling wood from Sangre de Cristo to Rosita noted blackened cliffs at Silver Cliff and sampled them. They staked the Silver Cliff and Racine Boy claims on which an open pit was later developed. These initial discoveries led to much more extensive prospecting of the areas which resulted in the discovery of several other significant silver occurrences, including the Bull Domingo Mine, developed on a breccia pipe, Plata Verde, Horn Silver, Queen of the Valley, Rambler and Kate. That significant work was carried out is attested to by the hundreds of pits, trenches and other workings dotting the plateau to the north of the town of Silver Cliff.

Fieldman (1966) reports that most of the production from the Silver Cliff area had ceased by 1885, with the exception of the Passiflora, Defender and Lady Flora veins, amongst others, which continued to produce sporadically up until 1965. From 1872 to 1923 Custer County produced approximately \$US8,400,000, the majority of which was from the Silver Cliff and Rosita areas.

The area was mapped and studied by US Geological Service (USGS) geologists in 1895–1896. Since then, several major mining companies including Noranda Exploration, Duval Corporation, Cotter Corporation and American Smelting and Refining Co. (ASARCO) have all done work in the area or shown interest in it but have been frustrated by the complicated mineral rights ownership situations.

### **6.2 RECENT HISTORY**

More recent exploration was started in the Silver Cliff area in 1962, when geologists with Congdon and Carey Ltd. (C&G) conducted some original reconnaissance work and geological mapping in the Rosita and Westcliffe areas. C&G then undertook a consolidation of more than 1400 acres (566 ha) of mineral rights (Fieldman 1966).

From the 1960's to the mid 1980's C&G, either on their own, or through option and joint venture agreements with other groups, carried out exploration at a number of different levels on a number of different targets on the Silver Cliff Property. These exploration activities, as reported by Fieldman (1966) and Sawyer (1984) are summarized below:

- **1965** – C&G conduct geochemical and geophysical surveys, geological mapping. Four hundred and twelve soil samples were collected on a grid with N-S lines spaced approximately 180m apart and samples collected approximately every 90m along the lines. An additional 140 samples rock samples were collected in this area. All geochemical samples were analyzed for lead zinc and silver. Ground magnetics, IP and Self Potential surveys were also run; however, the exact locations of these surveys are not known.
- **1966-1967** – C&G drill 20 holes totalling 2882.5 metres. Some of the results indicated bulk tonnage, near surface mineralization in the Kate area (Mukherjee and Fieldman, 1974).
- **Late 1967** – Callahan Mining Company (CMC) optioned the project from C&G and drilled 51 rotary holes totalling 2260 m and 16 diamond drill holes totalling 789 metres on 122 m centres, again mainly in the Kate Zone.
- **1969** – CMC joint ventured the project with Conoco and completed 81 RAB drill holes (2344 m), 4 diamond drill holes (190 m) and 7 rotary drillholes (184 m) aimed at confirming earlier results. Additionally, Conoco collected a bulk sample from an area measuring 43m by 18m and sent material for a preliminary metallurgical test.
- **1971** – Conoco assumed management of the program and drilled 62 short RAB drill holes for a total of 1055 m, all inclined 60° to the north. Additional metallurgical tests were carried out.
- **1973** - C&G resumed control and management of the project and continued in this position until 1979. Work included a re-evaluation of all earlier work from which they determined that only about half of the RAB holes had been effective and that there remained good potential of additional mineralization outside the area of concentrated drilling. C&G drilled 9 angled diamond drill holes totalling 357 m and continued to examine project metallurgy.
- **1980** – late in 1980 Freeport Exploration Company optioned the property from C&G and conducted a drilling program of unknown size and extent but dropped the option in 1981.
- **1981** - Chevron Standard Minerals did a minor amount of informal work on a permission basis but no agreement was formalized.
- **1981** – C&G changed their name to Coca Mines Inc.
- **1984** – Coca and Hardscrabble Partners Ltd. optioned the Silver Cliff Property to Pacific Minesearch Ltd. Who carried out filed investigation and mapping and recommended a program of drilling and metallurgical testwork but it is not known if the program was ever carried out.

- **1987-1990** – Tenneco Minerals completed a feasibility study after an intensive drilling campaign and announced plans to construct a \$35 million mill at Silver Cliff. This was the year before the parent company, Tenneco, decided to divest their mineral interests so the decision was reversed in 1991.
- **1991** – Coca merges with Hecla Mining Company of Coeur d’Alene, Idaho.
- **1992** – Hecla Mining drilled seven reverse circulation holes for 566m. The holes targeted the White Hills area in the northern part of the property. Drilling results indicated that gold mineralization seemed to be associated with vuggy silica associated with kaolinite alteration (Druecker, 1992).

After the Hecla acquisition and the limited drill program by Hecla, no exploration work has been carried out on the Property until the acquisition by Viscount.

### **6.3 HISTORIC MINERAL RESOURCE ESTIMATES**

Several resource estimates were completed in the past on the Silver Cliff property and more specifically the Kate Zone (Table 6.1). The mineral resource estimates were all prepared before the implementation NI43-101. The mineral resources stated in Table 6.1 Historical mineral resource estimates are historical estimates as defined in NI43-101. The estimates are relevant in that they were prepared by different companies over several years yet are very similar in contained tonnage and grade. They offer a good approximation of the tonnage and grade that can be expected of the Kate deposit as drilled. The estimates are somewhat reliable in that they were prepared by individuals with experience using polygonal estimation methods in use at the time. The estimates do not use mineral resource categories as defined in NI43-101. The estimates are only stated for historical completeness and are superseded by the estimate presented in Section 14 of this report. For this reason, the historical estimates should not be relied upon.

**Table 6.1 Historical mineral resource estimates**

Date	company	cut off (g/t)	classification	Tonnes	grade (Ag g/t)	reference
1972	Conoco	31.1	NA	9,980,000	52	Maire, 1972
1974	C&G	31.1	NA	6,440,000	61	Mukherjee & Fieldman, 1974

### **6.4 HISTORIC PRODUCTION**

A number of mineralized occurrences in the Silver Cliff area have been mined by both open pit and underground mining methods. There are however, no grade and tonnage figures available for these, only the dollar values for overall production given in Section 6.1.

## 7.0 GEOLOGICAL SETTING & MINERALIZATION

### 7.1 INTRODUCTION

This section discusses the geology of the Silver Cliff area, much of the information was drawn from Fieldman (1966) and Sawyer (1984).

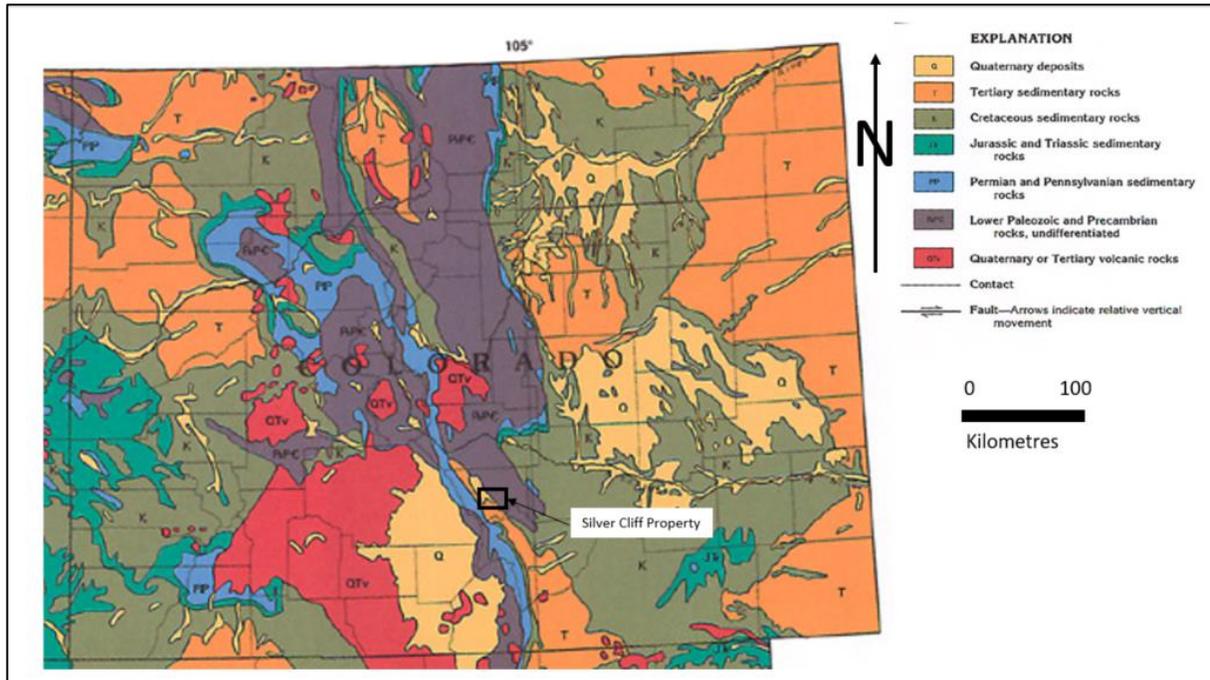
### 7.2 REGIONAL GEOLOGY

Regionally, the rocks surrounding the Silver Cliff area are part of a Precambrian complex of metasedimentary and intrusive rocks that form the basement to the district. The rocks include hornblende gneiss, granite gneiss, pegmatite and migmatite. Northwest striking syenite dykes of Late Precambrian age intrude the older foliated gneisses (Figure 7.1).

The Silver Cliff and Rosita areas are underlain by two eruptive centres, about 9 kilometres apart, of Oligocene to Miocene age that are at least in part cogenetic and coeval. The contact between the Precambrian rocks and the Tertiary volcanic rocks derived from these centres is partly faulted and partly unconformable. The Silver Cliff caldera covers an area of approximately 3.2 by 4.0 kilometres, much smaller than the Rosita volcanic centre lying to the east-southeast and is essentially surrounded by the Precambrian basement rocks.

Structurally the major feature of the Silver Cliff area is the caldera itself which has resulted due to subsidence along marginal ring faults overlapped by vent material. These are discernable on the east side of the caldera but obscured elsewhere. The southern part of the caldera appears to be the deepest and thought to represent the neck.

At least three sets of through going faults have been identified that transgress the caldera filling and continue into the Precambrian basement rocks. These sets are oriented north-westerly, north-easterly and north-south. All appear to be younger than the bounding ring faults with the north-south set being the youngest.



Source: USGS 1995

Figure 7.1 Regional geology of Colorado

### 7.3 LOCAL GEOLOGY

The Silver Cliff caldera consists of a felsic volcanic pile in excess of 600 metres thick. The upper 90 metres of the pile is extrusive in origin and is composed of mainly flow banded, flow brecciated and spherulitic rhyolites with lenticular bodies of volcanic glass (obsidian), often present near the base of this sequence (Sharp, 1978) (Figure 7.2). The lower rocks are epiclastic and pyroclastic in origin and include tuffs, breccias and conglomerate. Fieldman (1966) has described the following volcanic stratigraphy from oldest to youngest. Coding for these units from the geologic map prepared by Sharp (1978), which agrees closely with the map provided by Sawyer (1984), is included where possible.

#### Rhyolite Tuff, Breccia and Conglomerate (Tru, Trrw, Tlt)

This is the basal Tertiary (Miocene) unit and is represented by a thick sequence (at least 550 m) of fine to coarse tuffs, lapilli tuffs, breccias and volcanic conglomerate. The beds weather to light to darker grey, pink and brown. Most are coarse or lapilli tuffs. Fragments of Precambrian gneiss and granite are common. The beds are not resistant, and form subdued grass covered expressions. Variable attitudes make measurement of an accurate thickness but a minimum thickness of 75 metres is shown and the Geyser shaft is reported to have passed through 550 metres these units.

Rhyolite Breccia (Tbb)

A thin and local unit that caps Ben West Hill and the surrounding ridges to the north and east, this unit is approximately 25 metres thick. The unit is thick bedded and unsorted, but rhyolite and pumice blocks do decrease in size to the south where it grades into a coarse lapilli tuff. The matrix to the breccia is highly silicified so it forms resistant ridges.

Rhyolite Lava Flows (Tr1, Tr2, Tr3, Tr4, Trc, Tg1 to Tg5)

This is the most widespread and best exposed unit in the Silver Cliff area. The areal extent of the flow complex is approximately 260 hectares and its thickness as demonstrated in the Geyser shaft is approximately 75 metres. It is unconformable on the underlying units and dips gently westwards. Fieldman (1966) divided this unit into three zones with transitional boundaries: an upper white to pale orange to brown, flow banded rhyolite about 45 metres thick. Near the base of this unit spherulites appear which increase in size and number into the underlying zone which is composed of numerous compound spherulites enclosed in envelopes of clay. Where unaltered and the clay envelopes are not continuous, black perlitic obsidian forms the third and lowest zone. These last two zones are approximately 15 metres thick.

While the stratigraphic order appears more or less the same, Sharp (1978) has broken out several different flows from within the upper flow unit described by Fieldman (1966) which are described below. Fieldman and Crowley (1980) indicate that these units are interbedded, overlapping and gradational to one another.

- **Tr1** – white porcellaneous rhyolite that forms dykes, and ropey to glassy and scoriaceous to boney flows from dykes. Clear quartz grains are common.
- **Tr2** – white to cream banded flows and breccias pipes in the Geyser vent area. The rhyolite is lithophysal and contains garnet and topaz in cavities.
- **Tr3** – Strongly flow banded and boney and highly fractured rhyolite, with textures well exposed near the old Kate mine. Black Me-Fe oxides fill fractures and heavily stain the rock.
- **Tr4** – Flow banded rhyolite and tuff. Overlies an obsidian unit exposed in the Geyser workings.

Sharp also broke out several different glassy flows, or obsidian units, of varying colour and stages of devitrification, several of which contained the spherulitic units noted by Fieldman (1966) in their upper portions.



host rocks correspond to units the Tr1 to Tr4 of Sharp (1978). Silver appears to have been deposited as replacement and infill in porous volcanic breccia units and manganese appears to overprint the silver mineralization in the Tr3 unit (Hildebrand and Mosier, 1974). The mineralization is associated with intense kaolinite alteration.

The silver mineralization is conformable to stratigraphy and occurs from surface to depths varying from approximately 40 to 50 m. Aside from the stratigraphic and fracture controls, the location of silver mineralization appears to have been at least partially controlled by the geometry of volcanic glass or obsidian lenses, as better silver grades are encountered just above or on the margins of them, and not where the flows overlie the rhyolite tuff, breccia and conglomerate units (Mukherjee, 1976).

Manganese oxide (cryptomelane) locally occurs with silver bearing chlorides (chlorargyrite), bromides (bromargyrite) and sulphide (acanthite) minerals in breccias as matrix fillings and also as small vuggy zones in the matrix and breccia fragments. In the flow banded rhyolite manganese and silver mineralization occur as veins and partial fracture fillings, perpendicular and parallel to the flow banding. The veins range in thickness from a hairline to approximately 13.0 cm but are more commonly 1.5 cm to 5.0 cm wide. The smaller veins have no regular structural pattern or orientation, but larger ones trend northwest or northeast and are generally vertical. Where fractures are not completely filled, the manganese oxides line the wall with botryoidal surfaces.

Silver mineralization in the lower flow unit is associated with cryptomelane along with goethite, fluorite, barite, dickite and hematite. Native silver and argentite have been reported in the spherulitic horizon, immediately above the glass lenses (Mukherjee, 1976).

## **8.0 DEPOSIT TYPE**

It is difficult to fit the Kate deposit, or any of the manganese oxide silver mineralization in the Silver Cliff area, into a deposit model but the deposits do share similarities with low sulphidation epithermal silver deposits.

Low sulphidation silver deposits tend to occur as veins, stockwork or breccia. The mineralization commonly exhibits open-space filling textures and is associated with volcanic-related hydrothermal activity. The deposits are often associated with regional-scale fracture systems related to grabens, (resurgent) calderas or flow-dome complexes. Extensional structures in volcanic fields (normal faults, fault splays, ladder veins and cymoid loops, etc.) are common; locally graben or caldera-fill clastic rocks are present. High-level (subvolcanic) stocks and/or dikes and pebble breccia diatremes occur in some areas. Locally resurgent or domal structures are related to underlying intrusive bodies.

Most deposits occur in volcanic rocks. Some deposits occur in areas with bimodal volcanism and extensive subaerial ashflow deposits. The deposits are commonly zoned vertically over 250 to 350m from a base metal poor, Au-Ag-rich top to a relatively Ag-rich base metal zone and an underlying base metal rich zone grading at depth into a sparse base metal, pyritic zone. From surface to depth, metal zones contain: Au-Ag-As-Sb-Hg, Au-Ag-Pb-Zn-Cu, Ag- Pb-Zn and fluorite may be abundant.

Pervasive silicification in vein envelopes is flanked by sericite-illite-kaolinite assemblages. Advanced argillic alteration (kaolinite-alunite) may form along the tops of mineralized zones. Propylitic alteration dominates at depth and peripherally. Associated gangue minerals include quartz, amethyst, chalcedony, calcite; adularia, sericite, barite, fluorite, Ca- Mg-Mn-Fe carbonate minerals, hematite and chlorite.

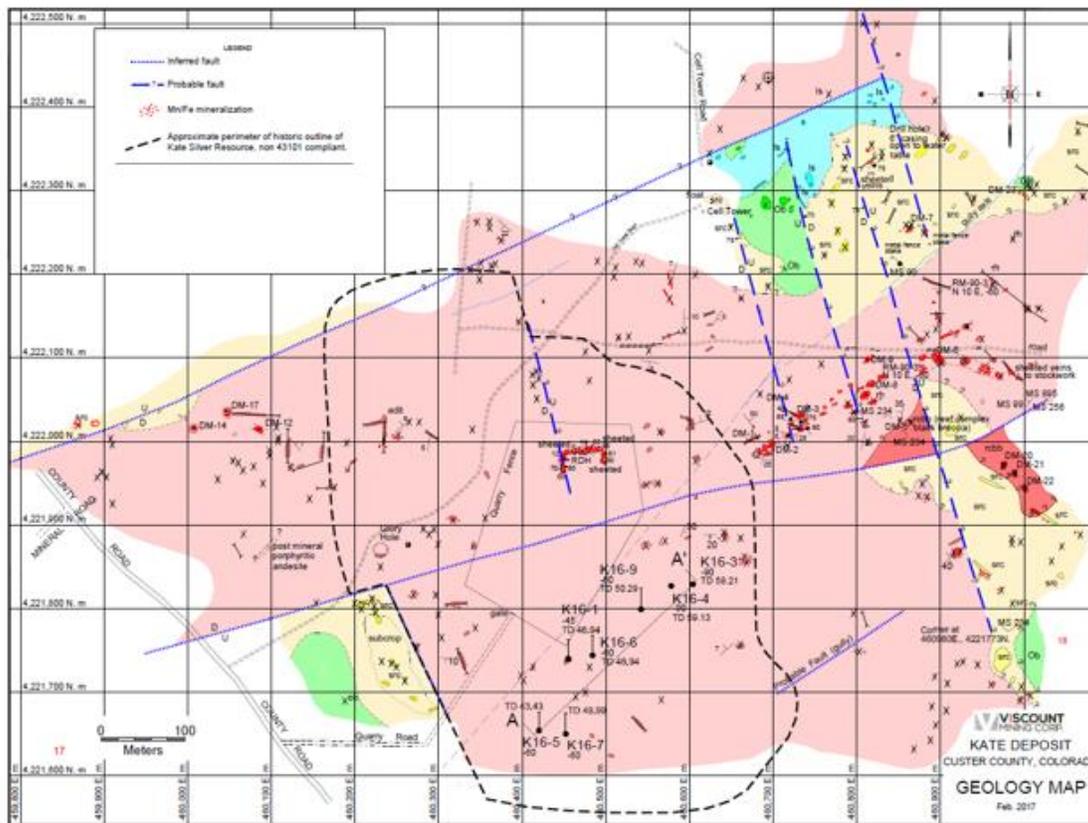
The Kate deposit seem to share some of the characteristics of low sulphidation silver deposits. Of the two rhyolite flow units that have been explored by Viscount, in the older and smaller unit, manganese and iron oxide staining is common, and little or no gold is present.

## 9.0 EXPLORATION

The Silver Cliff property has been explored by Viscount and a number of predecessor companies. Past exploration is summarized in Sections 6, and 10. Little, if any exploration work appears to have been carried out on the property from the early 1980's until Viscount started work in 2016.

In 2016, Viscount carried out a data compilation and a prepared a geological map of the Kate deposit area (Figure 9.1). Viscount also carried out a preliminary drilling program, drilling nineteen holes to confirm some of the historical drill results reported by the previous operators. The drilling program and results are discussed in Section 10 of this report.

In March of 2018, Viscount commissioned MtnCarto of Fraser Colorado to fly an aerial survey over the main Kate deposit area to produce a high-resolution, one metre contour, 3D topographic map of the surface of the deposit.



Source: Viscount 2017 with modifications

Figure 9.1 Viscount geological mapping of Kate deposit area

## 10.0 DRILLING

Most of the drilling on the Silver Cliff Property has been done by various property owners. Viscount has drilled a total of nineteen drill holes in two programs aimed at verifying the historical results. This section summarizes the results of the historical and Viscount drill programs.

### 10.1 HISTORICAL DRILLING

There is a total of 397 historical drill holes in the Viscount database, 285 are in the immediate vicinity of the Kate deposit and 79 holes were drilled on land not currently controlled by Viscount. Most of the holes, 156 were drilled on land controlled by the Knight agreement, 144 drill holes were drilled on the Joint Claims and 18 holes were drilled on the Colgate Patents. Table 10.1 summarises the historical drilling by year and Table 10.2 shows the same information summarized by Company. The historical records don't indicate what type of core rigs were used or what size of core was produced for any of the historical drilling programs. ACS assumed that all drilling was done by independent contractors as this was the practice at the time of the historical program but there are no records to indicate if contractors were used or not.

**Table 10.1 Summary of drilling by year**

Year	Total metres	No of holes
1966	1087.17	6
1967	462.68	8
1968	3045.21	66
1970	1144.52	58
1971	745.29	49
1973	521.50	9
1975	164.58	3
1977	365.45	7
1979	479.75	10
1980	458.71	4
1981	830.54	6
1982	332.22	2
1983	577.57	3
1984	1331.00	13
1986	381.00	5
1988	3822.10	68
1989	4127.19	73
1992	566.00	7
<b>Total</b>	<b>20442.50</b>	<b>397</b>

**Table 10.2 Summary of historical drilling by company**

Company	Total metres	No of Holes
Callahan	4189.733	124
Coca Mines	12742.436	202
Conoco	745.287	49
Freeport	2199.043	15
Hecla	566	7
Total	20442.5	397

Information about some of the historical drill programs is somewhat limited. Few drill logs are available and assay summary sheets are only available for some of the holes. Of the 397 historical holes, 48 are diamond drill holes (DDH), 85 are reverse circulation holes (RC), 99 are reverse air blast holes (RAB) and the drill hole type is unknown for 165 of the historical holes.

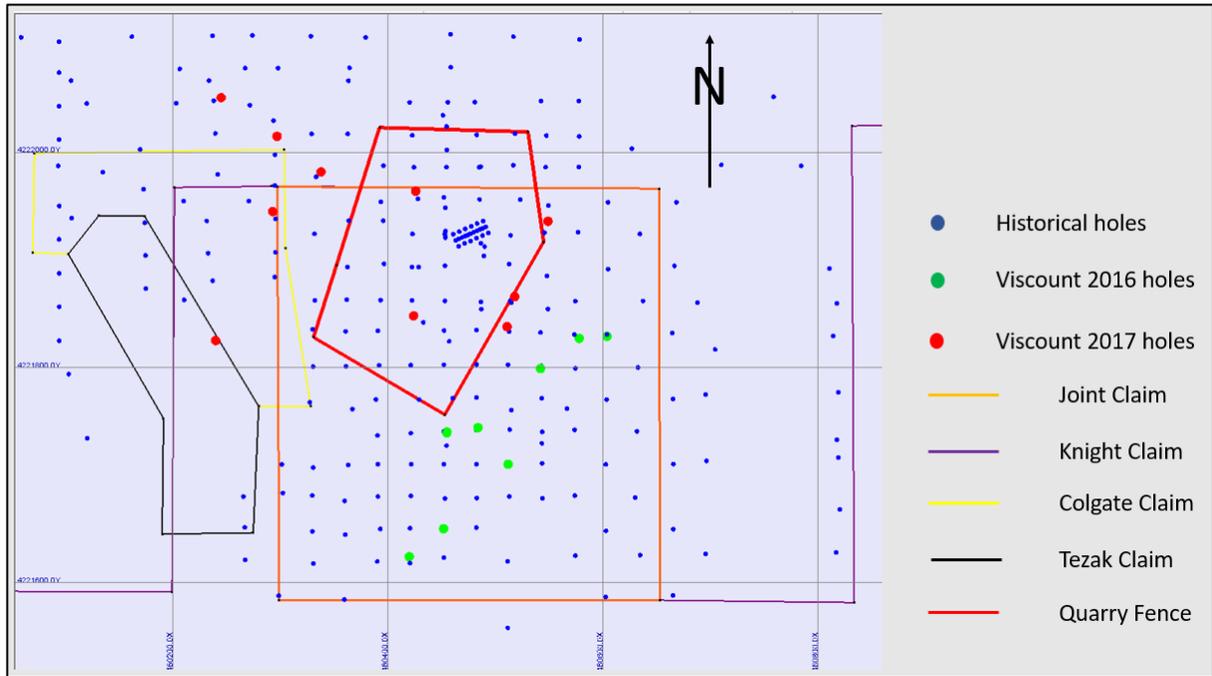
For the 285 historical drill holes in the Kate deposit area, original assay certificates are only available for one drill hole. However, copies of hand written assay logs are available for 119 drill holes and 48 holes of the remaining 165 holes were tagged as having no significant silver assays. The remaining 117 drill holes only have a single assay value composited across the entire Kate deposit, these holes could only be used to guide the construction of the wireframe outlining the mineralized zone. From the 285 historical drill holes in the Kate area only 116 were deemed acceptable for inclusion in the resource estimate.

## **10.2 VISCOUNT DRILLING**

Viscount has carried out two drilling campaigns on the Silver Cliff Property to date. Nine holes were drilled in 2016 and ten additional holes were drilled in October of 2017. The drilling programs were targeted at the Kate deposit and primarily aimed at verifying the historical drill results. The 2016 drilling was carried out by Godbe Drilling, an independent drilling contractor. All logging was done by contractors employed by Viscount. The 2017 drill program was carried out by BDW International Drilling of Nevada. All cores for the Viscount 2016 drilling was HQ and, in 2017, most were HQ but a few holes were NQ in size.

Figure 10.1 shows the location of the Viscount drill programs and the historical drill hole locations along with the property boundaries.

**Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA**



Source: Viscount 2017 with modifications

Note grid lines are 200 by 200 m

**Figure 10.1 Planview showing drill hole location for Kate deposit area**

Table 10.2 summarizes the best intersections of the 2016 and 2017 Viscount drilling and Figure 10.2 shows a typical cross section across the Kate deposit. As can be seen most of the Viscount holes were drilled vertically to intersect the mineralization at 90 degrees as much as possible. Down hole intercepts for holes drilled at 60 degrees are about 15% longer interval than true width intervals. As most holes were short, less than 150 m, no down hole deviation measurements were collected.

**Table 10.3 Summary of Viscount drill intersections**

Hole Number	From (m)	To (m)	Interval (m)	Dip (°)	Ag (oz/t)	Ag (g/t)
K16-01	18.29	32.00	13.71	-60	29.71	924.0
including	18.29	24.38	6.09	-60	56.84	1768.0
including	24.38	28.04	3.66	-60	13.73	427.0
K16-03	17.37	34.14	16.76	-90	4.55	141.5
including	24.99	34.14	9.14	-90	7.76	241.5
K16-04	18.59	36.88	18.29	-90	6.56	204.0
including	27.74	35.36	7.62	-90	12.22	380.0
K16-05	19.81	33.53	13.72	-60	12.56	390.6

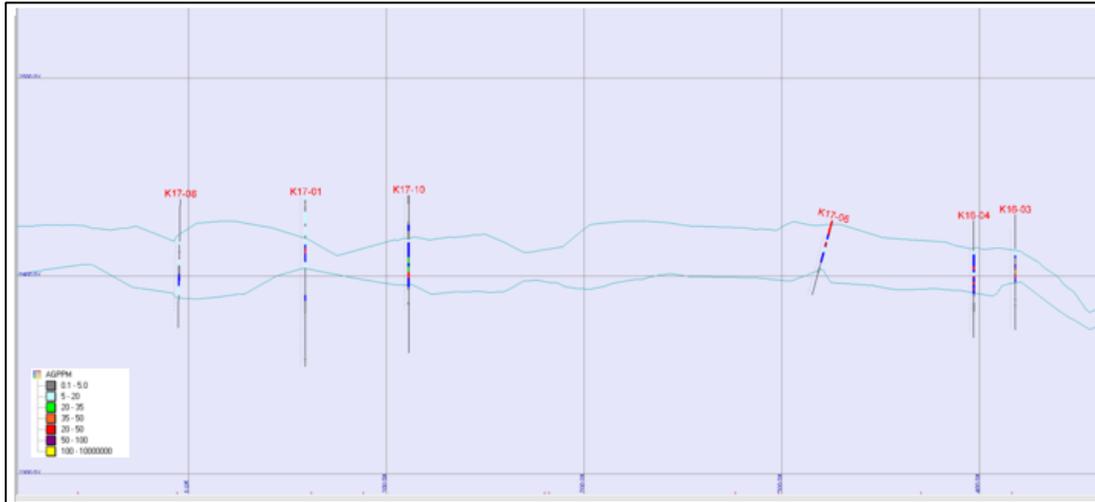
**Mineral Resource Estimate for the Silver Cliff Property, Custer  
County, Colorado, USA**

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including	25.91	32.00	6.09	-60	24.50	762.0
K16-06	28.96	36.58	7.62	-60	1.52	47.3
K16-07	14.33	46.33	32.00	-60	2.56	79.7
including	28.04	35.66	7.62	-60	8.10	252.0
K16-08	32.00	52.73	20.73	-60	7.39	230.0
including	39.62	50.29	10.67	-60	12.96	403.0
K16-09	25.91	41.15	15.24	-60	4.39	136.5
including	33.53	41.15	7.62	-60	7.11	221.0
K17-01	24.00	36.00	12.00	-90	2.89	90.0
including	25.50	28.50	3.00	-90	7.62	237.0
K17-02	1.50	34.50	33.00	-90	2.99	93.0
including	12.00	30.00	18.00	-90	3.87	120.5
K17-04	18.00	39.00	21.00	-90	3.91	121.7
including	22.50	34.50	12.00	-90	5.81	180.8
K17-05	9.50	24.50	15.00	-90	8.99	279.6
including	11.00	18.50	7.50	-90	15.34	477.0
K17-06	9.50	24.50	15.00	-60	4.21	131.0
including	12.50	15.50	3.00	-60	13.89	432.0
K17-07	12.00	24.00	12.00	-60	2.64	82.0
K17-08	38.00	48.50	10.50	-90	1.03	32.0
K17-10	24.00	46.50	22.50	-90	3.53	109.7

## Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA

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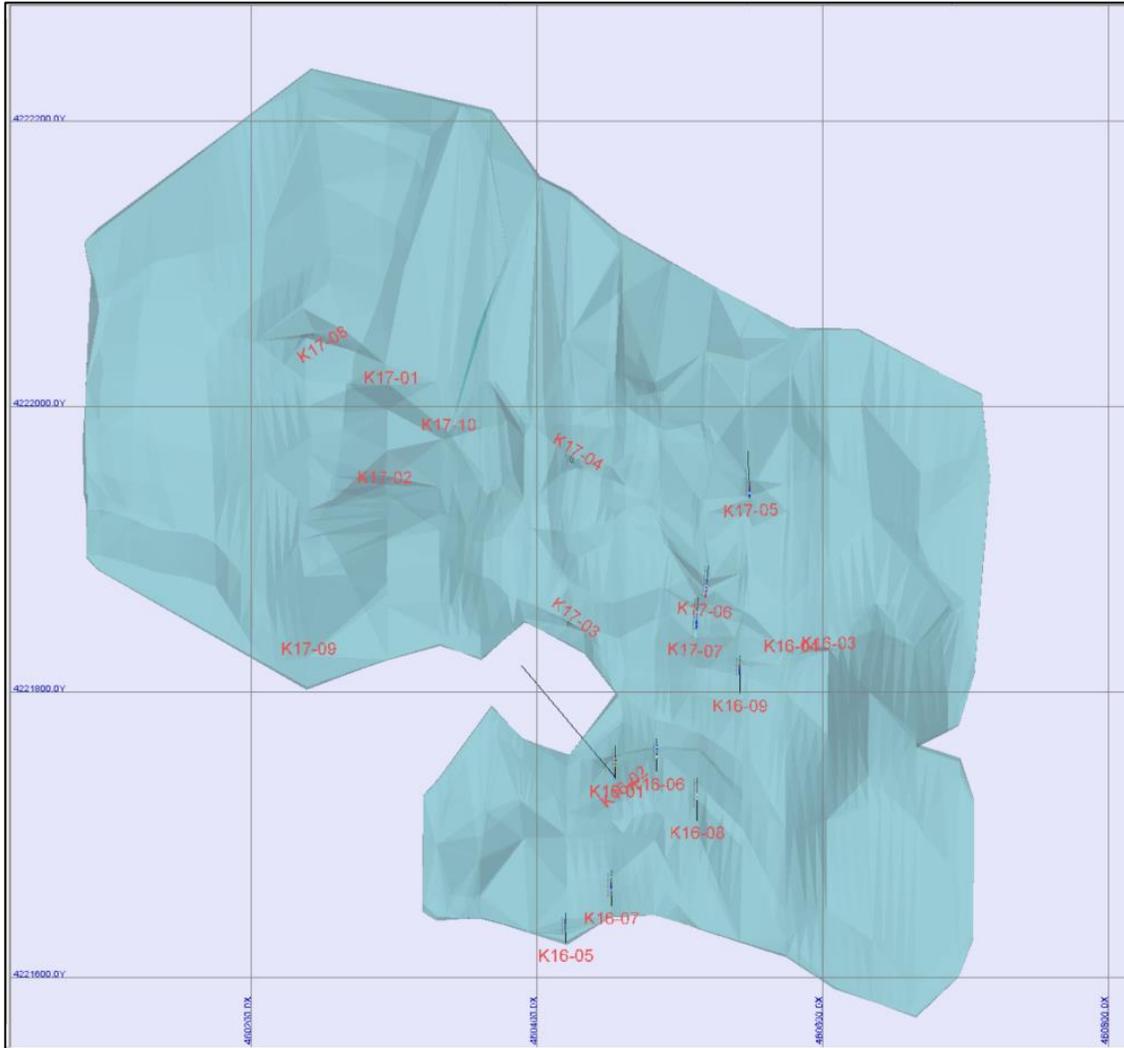


Source: ACS 2018

Note grid lines are 100 by 100 m

**Figure 10.2 Cross section looking northeast showing Viscount drill holes and outline of Kate deposit**

As most of the Viscount drilling was targeted to verify and validate the historical drilling, ACS compared the results of the Viscount drill holes with the historical twinned drill holes. The holes were positioned to evaluate the bulk of the Kate deposit and to provide comfort that some of the historical drill holes could be incorporated in resource estimate (Figure 10.3).



Source: ACS 2018  
Note grid lines are 200 by 200 m

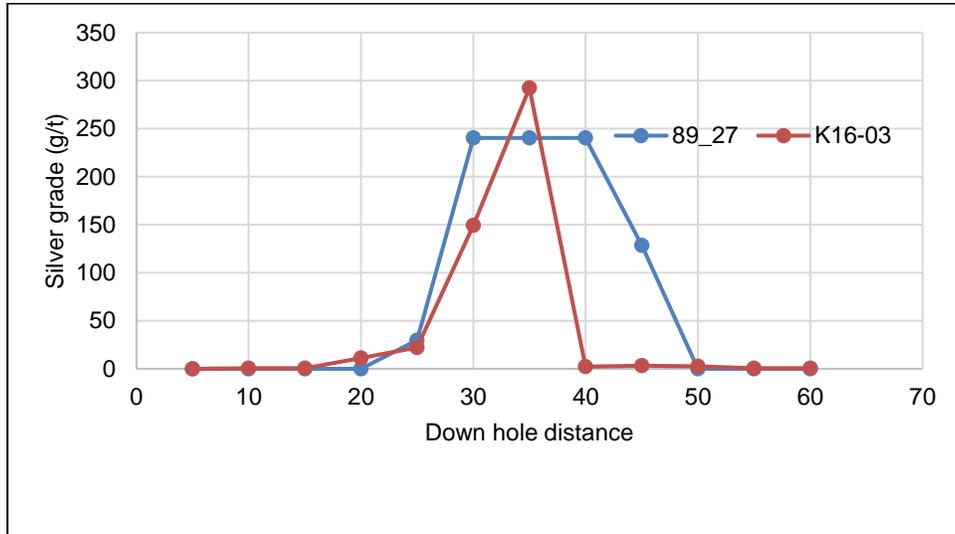
**Figure 10.3 Planview showing the outline of the Kate deposit and the location of the Viscount drill holes**

Comparing the Viscount drill holes with the historical drill data is complicated because of the different drilling methods used in the past and because several of the historical drill holes (all Round Mountain drill holes) don't have individual downhole assays. The only available data for these holes are a single assay value calculated across the entire Kate deposit. In order to facilitate the drill hole comparison, ACS composited all assay data at a fix 5 m interval down all drill holes. For the Round Mountain drill holes where a single assay value existed across the entire deposit, the single assay value was split into 5 m intervals and essentially duplicated if the original interval was wider than 5

## Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA

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m and diluted with zero at the upper and lower deposit contacts. Essentially, assay to assay comparison is not possible but meaningful comparisons are possible. In some holes the historical data shows a wider interval when compared to the Viscount drilling because of the compositing effect (Figure 10.4).

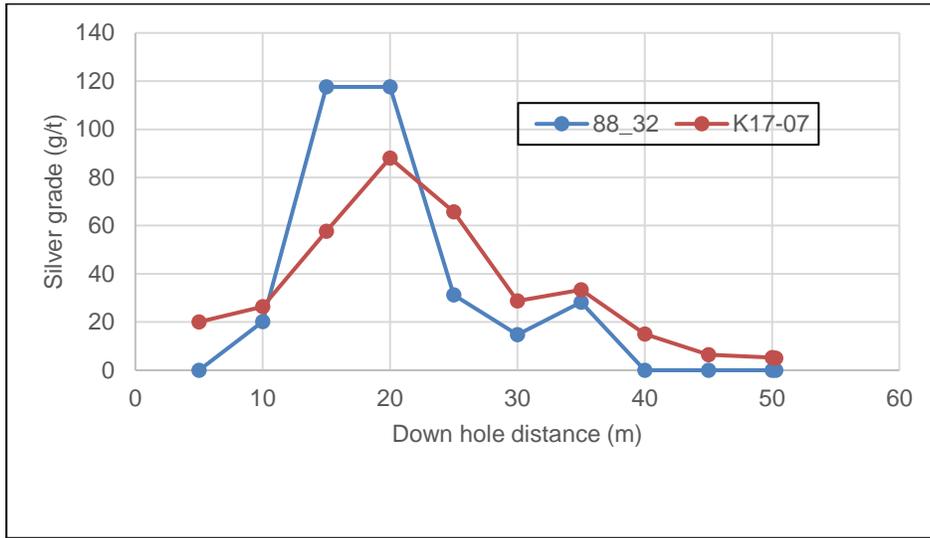


Source: ACS 2018

**Figure 10.4 Comparison of Viscount twin hole with Round Mountain historical hole**

Other drill holes show reasonable good agreement between the recent drilling and the historical Round Mountain holes (Figure 10.5).

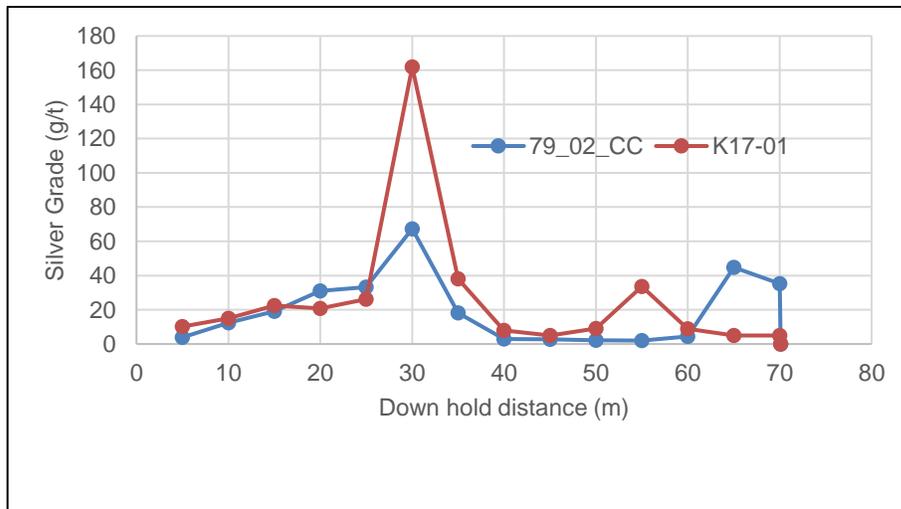
**Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA**



Source: ACS 2018

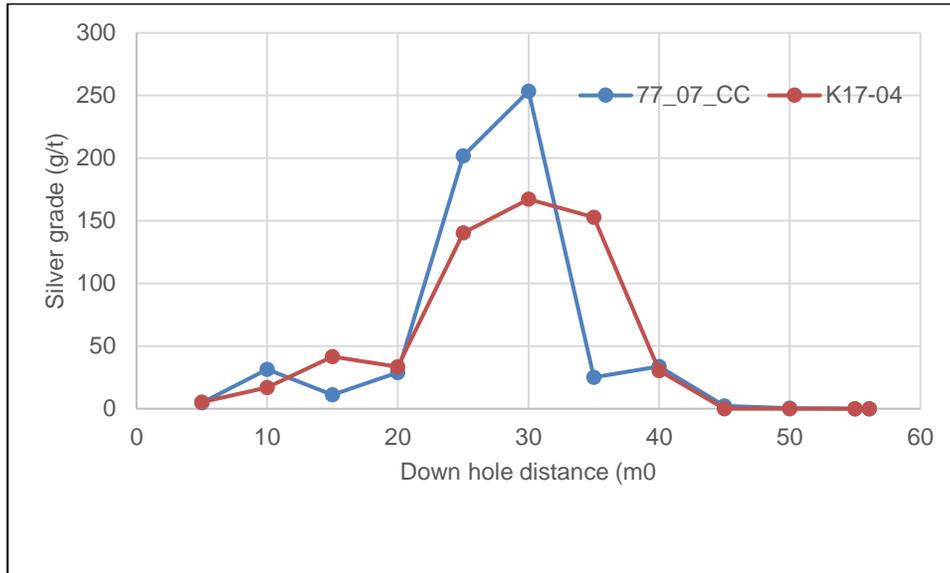
**Figure 10.5 Comparison of Viscount twin hole with Round Mountain historical hole**

Comparison of the Viscount drill holes with historical core holes seemed slightly better as these holes were assayed at regular intervals down the hole (Figure 10.6 and 10.7).



Source: ACS 2018

**Figure 10.6 Comparison of Viscount twin hole with historical core hole**



Source: ACS 2018

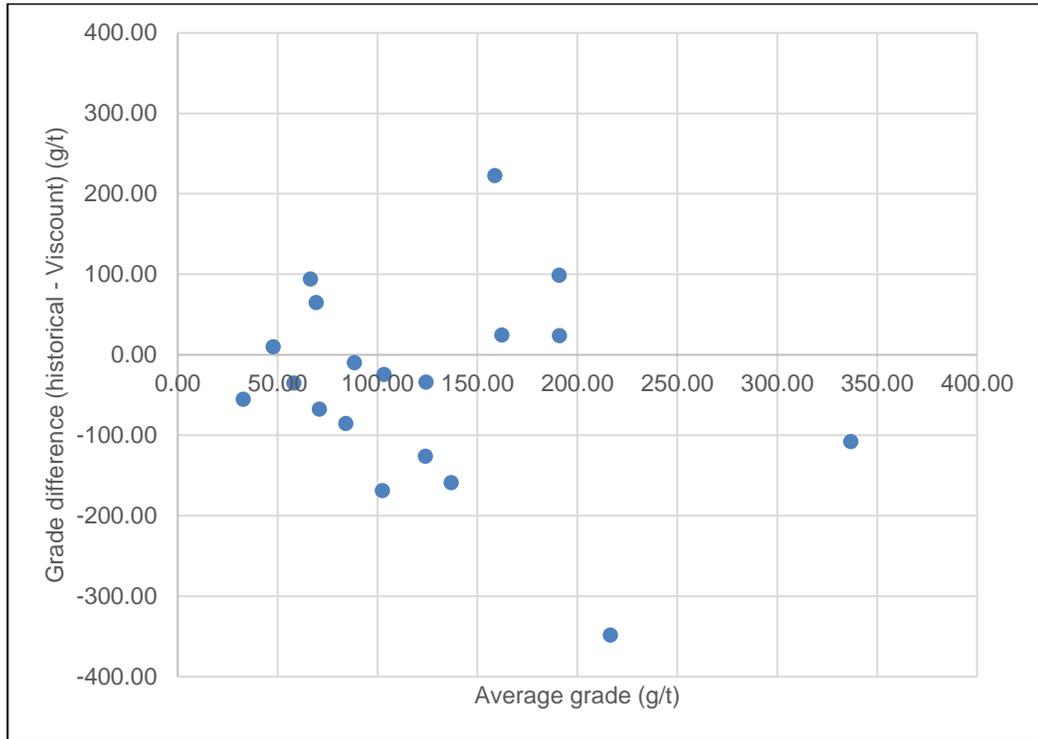
**Figure 10.7 Comparison of Viscount twin hole with historical core hole**

As a final comparison, ACS compared the average of the Viscount drill holes with the historical drill holes across the entire Kate deposit (Figure 10.8). As can be seen, there is a large difference between the new drilling and the historical drilling, but no apparent bias seems to exist between the two data sets. ACS concluded that the wide variation between the historical and Viscount drilling could be attributed to the fact that individual assays were not available for many of the historical holes, to the local grade variability in the deposit and the fact that some holes are not true twins but rather holes drilled near the original holes and to the different drilling technique between some of the historical holes and the Viscount drilling.

In conclusion, ACS decided to include all historical drill holes that had drill logs with individual assay data and sample intervals in the resource estimate. All historical drill holes that only had composited assay data were used to guide the wireframe modelling but excluded from the grade estimation.

**Mineral Resource Estimate for the Silver Cliff Property, Custer  
County, Colorado, USA**

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Source: ACS 2018

**Figure 10.8 Thompson-Howarth plot comparing Viscount twin holes with historical drill data across entire Kate deposit**

## 11.0 SAMPLE PREPARATION, ANALYSES & SECURITY

### 11.1 SAMPLING METHODS

#### 11.1.1 Drill Sampling

##### *Historical Drill holes*

No information is available about the sampling methods for the historical drilling but based on the assay sheets, it appears that all RC holes were sampled on 5-foot intervals (1.52 m). Most diamond drill holes were sampled in 4 or 5-foot lengths (1.2 to 1.52 m). Drill core recoveries were generally very good as reported in historical reports.

##### *Viscount Drilling*

Drill core samples from the 2016 drill program was sampled in 5-foot length (1.52 m). Drilling from the 2017 drilling was done at 1.5 m intervals. In some cases, effort was made to break sample intervals at lithological or mineralogical boundaries, resulting in sample intervals shorter than 1.5 m. After detailed geotechnical and geological logging was completed, the core was sawn in half with half of the core submitted to the lab for sample preparation and analysis. The second half of the core was stored at the core storage facility in Silver Cliff, CO.

All drill core for the 2017 program was scanned with a hand-held XRF analyser first to determine the intervals containing anomalous silver prior to sampling. All core was photographed prior to sampling. All sampling was performed by contractors employed by Viscount for the length of the drilling program. Core recovery was generally very good which is in agreement with historical records for the deposit.

### 11.2 ANALYTICAL LABORATORIES

Very little information exists about the historical drilling. While some drill logs are available, most logs only contain written assay records. Assay certificates only exist for seven of the historical drill holes (SC series). Samples from the SC series holes were assayed by Chemex Labs in Vancouver in 1984. References are made in some summary reports that Coca Mines used Skyline Labs for some of their assays but it unknown if all the Coca samples were shipped to Skyline or if any laboratories were used. Both Chemex (ALS Global now) and Skyline Laboratories are well-known independent laboratories and while both laboratories are ISO accredited, ACS is unaware of the accreditation that they may have held at the time that the work was done.

All samples collected by Viscount were sent to ALS Global in Vancouver for assaying.

### **11.3 SAMPLE PREPARATION & ANALYSIS**

#### **11.3.1 Sample Preparation**

No information is available on the sample preparation for the historical drill samples. All samples collected by Viscount were shipped to ALS where they were dried as required, crushed, and selection of a sub-split was then pulverized to produce a pulp sample sufficient for analytical purposes.

#### **11.3.2 Sample Analysis**

No information is available about the analytical methods used for the historical data, but the samples were probably analysed by fire assay for silver as that was the most accepted assay method when most of the samples were processed. All Viscount samples were analysed by fire assays method. The fire assay technique uses high temperature and flux to 'melt' the rock and allow the silver to be collected. A prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents in order to produce a lead button. The lead button containing the precious metals is cupelled to remove the lead. The remaining gold and silver bead is parted in dilute nitric acid, annealed and weighed as gold. Silver is then determined by the difference in weights.

### **11.4 QUALITY ASSURANCE AND QUALITY CONTROL**

No information is available for the historical drill holes, but a review of the historical logs show that duplicate samples were collected from time to time across the mineralized zone. ACS reviewed the duplicate sample data and noted that the duplicate results agreed reasonably well with the original sample but also note that much less than one percent of the historical data had been re-assayed. There is no evidence of blank samples having been submitted or evidence of historical twin drilling. ACS is unaware if any standard reference material (SRM) were included with the historical sampling and no evidence was found to support any SRM program in the historical documentation. ACS is of the opinion that is unlikely that any SRM program was implemented during the historical drilling as this was not standard industry practice at the time of the historical drill programs.

Viscount didn't include any QA/QC samples with their 2016 drill samples. A comprehensive program of SRM and blanks was implemented for the 2017 drill program. A total of 50 QA samples were included with the 2017 samples about 10% of the entire assay population. The samples included 20 blanks and 30 SRM. Three different standards were used to represent low, medium and high-grade silver values. The standards were commercially produced by MEG Inc. of Reno, Nevada.

ACS reviewed the results of the blanks and SRM assays and found them to be acceptable. The medium and high grade SRM fell within 2 standard deviations (2SD) of the expected value and low grade SRM was within 3SD of the expected value which is acceptable for a low range value. All blanks were well within the expected value reporting below the detection limit for silver.

No check samples have been sent to a secondary lab to test the laboratory accuracy, but ACS does not consider this necessary at this early stage of investigation by Viscount. ACS does recommend that Viscount considers sending some samples to a secondary laboratory in the future if a more significant drill program is considered for the Project.

#### **11.4.1 Comments on QAQC**

The historical QAQC for the Silver Cliff Property is lacking or non-existent. However, considering the dates over which the bulk of the work was carried out, the lack of QA/QC program or documentation is not surprising. This, however, doesn't imply that the historical data is not reliable or biased. Drilling by Viscount has demonstrated that the historical drill holes returned silver values similar to those encountered in the Viscount drill holes. The differences between the historical drill results and the Viscount drill results may be indicative of variability in the deposit (local nugget effect) or drill sampling techniques but does not seem to be indicative of a bias due to sampling or assaying.

The QA/QC program implemented by Viscount is in keeping with standard industry practices and acceptable for inclusion in a resource estimate. Standard results indicate no issues with assay accuracy and the blank sampling don't show any indication of contamination.

ACS is of the opinion that the Viscount drilling and QA/QC is acceptable for inclusion in a resource estimate. ACS is also of the opinion that the historical data that can be verified with drill logs is of sufficient reliability for inclusion in the estimate but warrant that additional twin drilling should continue to evaluate the variability between the historical holes and the Viscount drilling to determine the variability can be attributed to sampling technique, drill type or simply to grade variability within the deposit.

### **11.5 SECURITY**

#### **11.5.1 Security**

There are no records if any security measures were emplaced during the historical drilling. ACS is doubtful that any special security measures would have been used as this was not a common practice at the time that the historical programs were done.

For the Viscount drilling, all core was stored in a locked storage unit situated near the drill program at Silver Cliff. All drill core was moved from the drill site to the storage locker by Viscount employees. Core was logged and sampled by Viscount personnel and samples were bagged and shipped to ALS for processing by courier services.

#### **11.5.2 Storage**

All drill core from 2016 and 2017 programs is stored in a locked storage unit in Silver Cliff near the project area.

## **11.6 COMMENTS ON SECTION 11**

In the opinion of the ACS the quality of the analytical data is sufficiently reliable to support mineral resource estimation. The Viscount sample collection, preparation, analysis, and security were generally performed in accordance with exploration best practices and industry standards as follows:

- Sample collection and preparation for samples that support mineral resource estimation has been in line with industry-standard method;
- Drill core samples were analysed by independent laboratories using industry-standard methods for silver analyses;
- Drill programs have included the insertion of an adequate number of QAQC materials;
- The QA/QC program results do not indicate any problems with the analytical programs, and demonstrate that the results seem accurate and precise;
- Sample security has relied upon the fact that the samples were always attended to by drill crews or company staff while at the project site or logging facilities, and delivered to the lab either directly by project staff or commercial trucking companies;
- The data that was collected was entered in databases and validated through visual checks prior to being imported into the master drill database(s).
- Current sample storage procedures and storage areas are consistent with industry standards.

## 12.0 DATA VERIFICATION

### 12.1 DATABASE VERIFICATION

Verification of historical drill data was done by double entry of drill hole collar location in Imperial units and then converting the Imperial measurements to SI units. All down hole survey and assay data were entered in original Imperial units as well and converted once double checked against the original drill log data. All Viscount drill holes were initially located with hand held GPS and the locations were later verified by surveying the drill locations after the drill program was completed. All Viscount assay data were checked against original assay sheets provided by the assay laboratory.

### 12.2 SITE VISIT AND CHECK SAMPLES

ACS carried out a site visit to the Silver Cliff Property on project on September 25<sup>th</sup>, 2017. The site visit included examination of the 2016 drill core and drill sites, the surface geology, sampled intervals and mineralization. Several of the historical drill collars were examined during the site visit. A total of 35 drill collars were verified with hand-held GPS. The coordinates were verified against data from the historical drill logs. All GPS points agreed well with the historical locations. Four samples were collected from drill core from the 2016 Viscount drilling. Results of the ACS samples are summarised in Table 12.1. Overall, the samples collected returned similar silver values to the original samples collected by Viscount. Some of the Viscount samples returned higher silver values but upon examination of the core it appears that silver was associated with a fracture nearly parallel to the core axis and probably not completely sampled by ACS.

Overall the ACS sample results agree well with the previous results. The sampling program was not intended to be a robust validation program, instead the samples were only collected to verify that the Silver Cliff Property did host silver mineralization in the range of grades that have been reported for the Project in the past.

**Table 12.1 Results of 2017 re-sampling program**

Sample Number	Sample Location (ft)	Original Ag Value (g/t)	Re-assay Ag Value (g/t)
I951074	K16-09 from 113 to 114.5	328	330
I951075	K16-05 from 83 to 93	1020	790
I951076	K16-04 from 91 to 96	929	152
I951077	K16-01 from 74 to 76	1950	547

### **12.3 COMMENTS ON SECTION 12**

ACS has reviewed the appropriate reports and data and is of the opinion that the data verification programs undertaken on the data collected adequately support the geological interpretations, the analytical and database quality, and therefore support the use of the data in Mineral Resource estimation.

### **13.0 MINERAL PROCESSING & METALLURGICAL TESTING**

Viscount has not undertaken any metallurgical testing on Silver Cliff Property. Limited testing was done in 1984 at the Leadville Silver & Gold Inc. to evaluate if the silver Cliff mineralization was amenable to leaching. The tests seemed to indicate that silver could be extracted from the mineralization with possible recoveries of 82% under controlled laboratory conditions. No commercial testing has been carried out or if testing has been carried out the results no longer exists.

ACS recommends that Viscount collect some material from the Kate deposit and initiates preliminary metallurgical testing to evaluate the possible extractability of silver from the deposit.

## **14.0 MINERAL RESOURCE ESTIMATE**

### **14.1 INTRODUCTION**

The mineral resource model prepared by ACS utilised a total of 133 drill holes, 19 of which were drilled by Viscount in 2016 and 2017. The resource estimation work was completed by Dr. Gilles Arseneau, P. Geo. (APEGBC) an appropriate independent qualified person within the meaning of NI 43-101. The effective date of the Mineral Resource statement is April 15, 2018.

This section describes the resource estimation methodology and summarizes the key assumptions considered by ACS. In the opinion of ACS, the resource evaluation reported herein is a reasonable representation of the silver mineral resources found at the Kate deposit at the Silver Cliff Property at the current level of sampling. The mineral resources have been estimated in conformity with generally accepted CIM Estimation of Mineral Resource and Mineral Reserves Best Practices guidelines (2003) and are reported in accordance with the Canadian Securities Administrators' NI 43-101. Mineral resources that are not mineral reserves 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 Kate mineral resources was audited by ACS. ACS is of the opinion that the current drilling information is sufficiently reliable to interpret with confidence the silver mineralization and that some of the assay data are sufficiently reliable to support mineral resource estimation.

### **14.2 RESOURCE ESTIMATION PROCEDURES**

The resource evaluation methodology involved the following procedures:

- Database compilation and verification;
- Validation of wireframe models for the boundaries of the silver mineralization;
- Definition of resource domains;
- Data conditioning (compositing and capping) for geostatistical analysis;
- Block modelling and grade interpolation;
- Resource classification and validation;
- Assessment of reasonable prospects for economic extraction and selection of appropriate cut-off grades; and
- Preparation of mineral resource statement.

### **14.3 DRILL HOLE DATABASE**

The Silver Cliff drill hole database contains 416 drill holes. Most holes were drilled by Cocoa Mines in the 1970s and 1980s. Of the 416 holes, 304 have been drilled over the Kate deposit (Table 14.1).

Only 114 of the historical drill holes have drill logs with assay (Table 14.2). The remainder 171 drill holes only have a single composited assay value across the entire Kate deposit, these holes were used to guide the deposit modelling but were not used for the grade estimation.

**Table 14.1 Drill hole in the Kate deposit area**

Company	Number of holes	Metres
Callahan	87	3,086
Cocoa Mines	173	10,100
Conoco	25	402
Viscount	19	1,475
Total	304	15,063

**Table 14.2 Drill holes used in Kate grade estimation**

Company	Number of holes	Metres
Callahan	60	2,775
Cocoa Mines	54	2,726
Viscount	19	1,475
Total	133	6,976

There is a total of 4,694 assay records in the current database, of these 3,488 were collected within the Kate deposit area and 1,258 samples fall within the Kate deposit mineralized domain. Table 14.3 summarises the basic statistical data for all the assays in the Kate deposit area. Table 14.4 summarises the silver assays contained within the mineralized zone only and used for the estimation of mineral resources.

**Table 14.3 Basic statistical information for all assays in Kate deposit area**

Assays	Ag (g/t)
Count	3488
Mean	35.0
Std. Deviation	2413.0
Variation Coefficient	6.8
Minimum	0.0
Maximum	11890.0
1st percentile	0
5th percentile	0.3
10th percentile	1.0
25th percentile	3.1
Median	6.8
75th percentile	23.3

90th percentile	64.5
95th percentile	106.0
99th percentile	409.0

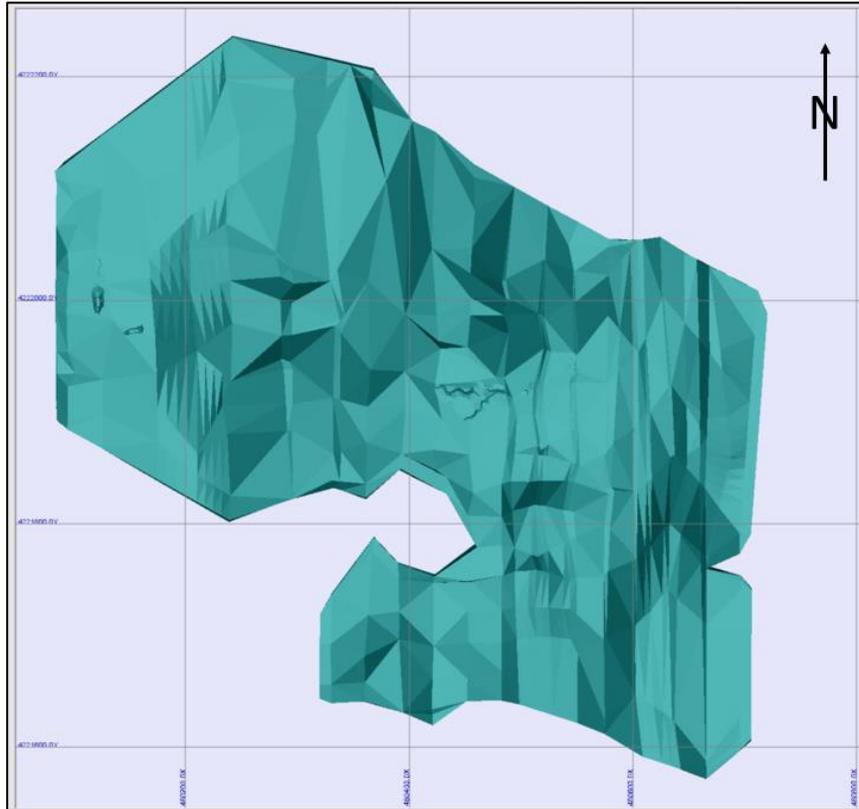
**Table 14.4 Basic statistical information of silver assays inside mineralized domain**

Assays	Ag (g/t)
Count	1291
Mean	83.7
Std. Deviation	391.0
Variation Coefficient	4.7
Minimum	0.0
Maximum	11890.0
1st percentile	0.0
5th percentile	4.1
10th percentile	6.8
25th percentile	16.0
Median	30.6
75th percentile	67.9
90th percentile	148.4
95th percentile	263.4
99th percentile	822.7

## **14.4 SOLID MODELLING**

Three-dimensional solid of the Kate mineralization was generated on north-south sections spaced 25 m apart. The wireframe was constructed to bracket all mineralization greater than 15 g/t silver (approximately 0.5 opt). Some lower grade intersections were included to allow for greater deposit continuity and few intervals that were isolated had to be excluded from the wireframe model.

The Kate deposit, as modelled, forms a single flat lying sheet (Figure 14.1). The deposit is near surface and about 600 by 605 m in plan view and about 5 to 30 m in thickness. While the deposit was modelled as a single sheet, the model shows several changes in dips that are probably indicative of faults or minor vertical offsets that could not be resolved at the current level of sampling.



Source: ACS 2018

Note: Grid lines are 200 by 200 m apart

**Figure 14.1 Planview showing Kate deposit wireframe**

## **14.5 BULK DENSITY**

There is very little data on bulk density of the Kate deposit. There is no information in any of the historical records about bulk density and Viscount only collected ten samples for bulk density determination during the 2017 drilling. The mineralization is hosted in altered felsic volcanic rocks, tuffs and breccias, so densities should be in the 2.3 to 2.7 range. The ten samples collected by Viscount returned an average density value of 2.36 which is within the expected range for felsic volcanic rocks.

ACS recommends that Viscount initiate a more comprehensive density sampling program to better define the bulk density of the mineralization at the Kate deposit.

## **14.6 CAPPING OF ASSAYS**

Block grade estimates may be unduly affected by high grade outliers. Therefore, the assay data were evaluated for high grade outliers. Based on the analysis of the distribution, ACS decided that

capping of high grade assays was warranted. ACS decided to cap silver the assay data to 1,000 g/t Ag. Table 14.5 summarises the cap and uncapped assay statistics.

**Table 14.5 Comparison of capped and uncapped assay statistics**

	Ag (g/t)	Ag (g/t) cap
Count	1291	1291
Minimum	0	0
Maximum	11890	1000
Mean	83.7	67.8
Number capped	0	9
Coefficient of variance	4.67	1.86
Metal affected by capping (%)	0	23

## 14.7 COMPOSITE STATISTICS

All assay data were composited to a fixed length prior to estimation. ACS evaluated the assay lengths for the deposit and found that most samples had an length of less than 2.1 m. ACS therefore decided to composite all assay data to 2.5 metres prior to estimation. Composite intervals were generated downhole from the geological wireframe. Any composite interval that was less than 1.25 m was linked to the previous composite interval so that all composites were between 1.27 and 3.71 m with the majority of the composites being 2.5 m in length. Table 14.6 compares the statistics for the capped and uncapped composited assay data within the Kate deposit.

**Table 14.6 Basic statistical information of capped and uncapped composites**

Assays	Ag (g/t)	Ag cap (g/t)
Count	746	746
Mean	79.8	63.4
Std. Deviation	330.9	111.9
Variation Coefficient	15.2	6.5
Minimum	0	0
Maximum	6802	1000
1st percentile	0	0
5th percentile	0.01	0.01
10th percentile	0.01	0.01
25th percentile	12.1	12.1
Median	30.1	30.1
75th percentile	61.8	61.8
90th percentile	136.7	136.7
95th percentile	252.1	252.1
99th percentile	728.2	674.5

## 14.8 SPATIAL ANALYSIS

Spatial continuity of silver was evaluated with correlograms developed using SAGE 2001 version 1.08. The correlogram measures the correlation between data values as a function of their separation distance and direction. The distance at which the correlogram is close to zero is called the “range of correlation” or simply the range. The range of the correlogram corresponds roughly to the more qualitative notion of the “range of influence” of a sample or composite.

Directional correlograms for the Kate deposit were somewhat inconclusive and no robust correlograms could be generated from the composited data. For this reason, ACS decided to use an omni-variogram to model the continuity of silver at the Kate deposit. Table 14.7 summarises the omni-directional correlogram parameters.

**Table 14.7 Correlogram parameters used for grade estimation**

Metal	Model Type	Nugget (Co)	C <sub>1</sub>	Rotation			Range		
				(Z)	(Y)	(Z)	Rot X	Rot Y	Rot Z
Ag	Exponential	0.23	0.769	0	0	0	25	25	25

## 14.9 BLOCK MODEL

A 3D block model was generated using Geovia GEMs Version 6.8.1 to represent the silver mineralization at the Kate deposit.

The model is orientated orthogonal to the UTM topographic grid and utilises a 10 by 10 by 5 m block size. Block model parameters are outlined in Table 14.8.

**Table 14.8 Block model parameters for the Kate deposit**

Coordinates			Origin Coordinates	Block Size (m)	Number of Blocks
Axis Direction	Axis				
Easting	X	Column	460,000	10	80
Northing	Y	Row	4,221,500	10	80
Elevation	Z	Level	2,360	5	20

silver grades were interpolated using ordinary kriging in two passes as outlined in Table 14.9. Grades were only interpolated into blocks in pass two if they had not been interpolated by a previous pass.

**Table 14.9 Silver interpolation parameters**

Pass	Rotation			Search Ellipse Size			No of composites		Max no per hole
	Z	Y	Z	X	Y	Z	Min	Max	
1	0	0	0	50	50	10	4	16	3
2	0	0	0	100	100	25	4	16	3

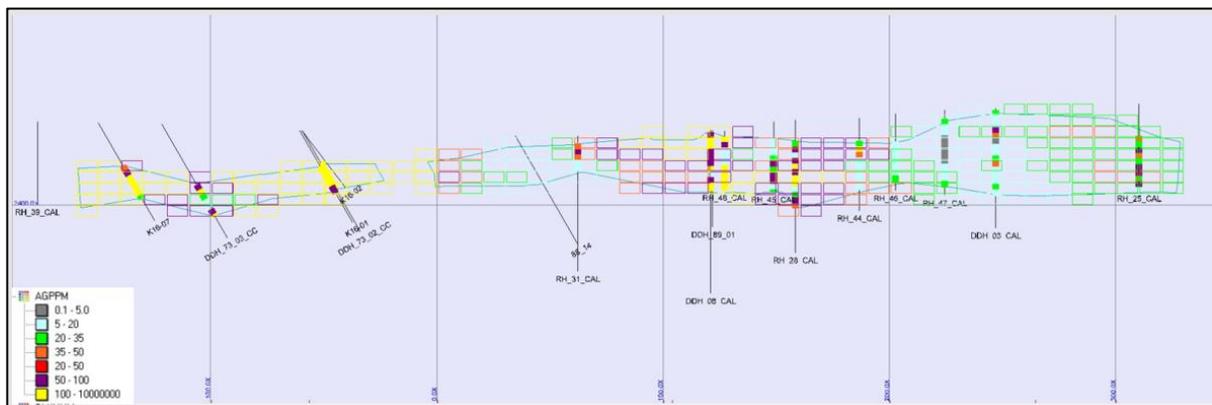
Bulk densities were coded in the model based on the block rock code. All mineralized blocks were assigned a 2.36 t/m<sup>3</sup> bulk density and all waste blocks were assigned 2.72 t/m<sup>3</sup>.

## 14.10 MODEL VALIDATION

The model was validated by completing a series of visual inspections and by comparison of average assay grades with average block estimates along different directions - swath plots and by estimating the mineral resource using inverse distance squared as well as ordinary kriging.

### 14.10.1 Visual Comparison

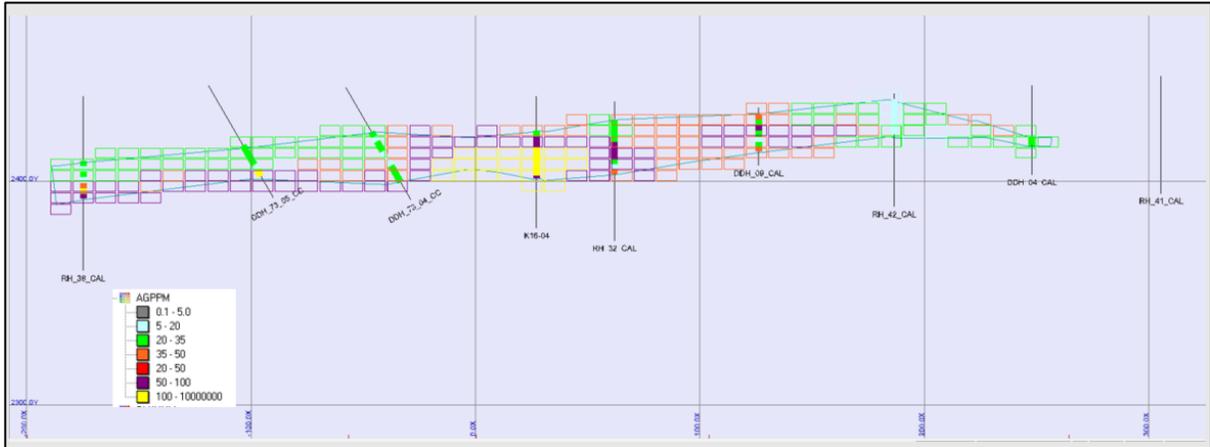
The model was checked for proper coding of drill hole intervals and block model cells. Coding was found to be properly done. Grade interpolation was examined relative to drill hole composite values by inspecting sections and plans. The checks showed good agreement between drill hole composite values and model cell values (Figure 14.2 and Figure 14.3).



Source: ACS 2018

Note: Grid lines are 100 by 100 m apart and blocks are 10 by 5 m

**Figure 14.2 North-south section at 460450E comparing drill hole composites and estimated block silver grades**



Source: ACS 2018

Note: Grid lines are 100 by 100 m apart and blocks are 10 by 5 m

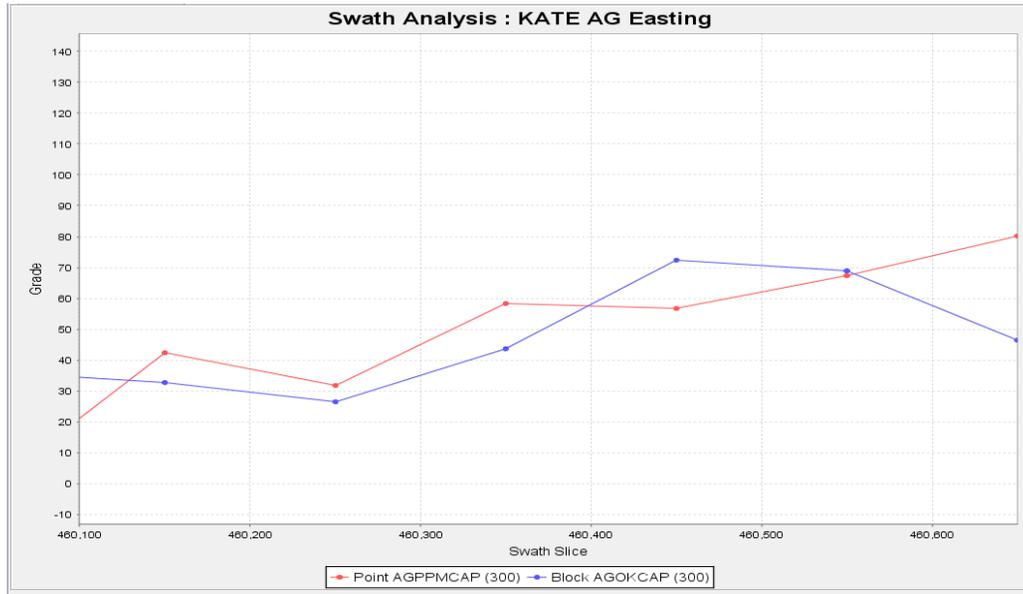
**Figure 14.3 North-south section at 460575E comparing drill hole composites and estimated silver grades**

### 14.10.2 Swath Plots

Average composite grades and average block estimates were compared along different directions. This involved calculating de-clustered average composite grades and comparing them with average block estimates along east-west and north-south swaths.

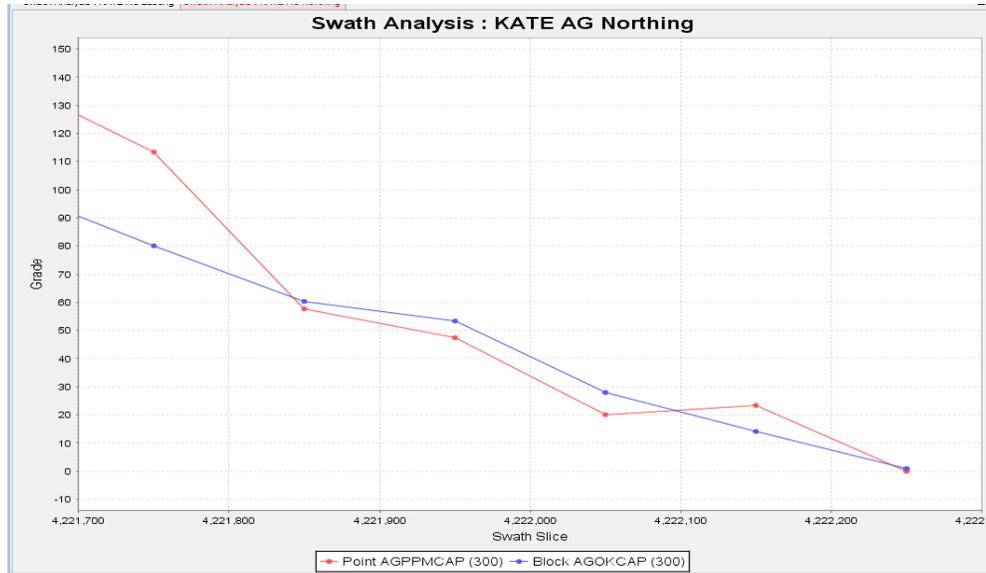
Figure 14.4 shows the east-west swath plot for silver. On average, the estimated data agree well with the composited data with the estimated values being slightly more smoothed than the composite data. Figure 14.5 shows the north-south swath for silver, the plot shows a good agreement between the estimated values and the composited data.

# Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA



Source: ACS 2018

Figure 14.4 East-west Swath plots for silver values



Source: ACS 2018

Figure 14.5 North-south swath plot for silver values

## **14.11 RESOURCE CLASSIFICATION**

Block model quantities and grade estimates for the Kate silver project were classified according to the CIM Definition Standards for Mineral Resources and Mineral Reserves (the CIM Definition Standards, May 2014) by Dr. Gilles Arseneau, P. Geo. (APEGBC), an independent “qualified person” for the purpose of NI 43-101.

Mineral resource classification is typically a subjective concept; however, industry best practices suggest that resource classification should consider the confidence in the geological continuity of the mineralized structures, the quality and quantity of exploration data supporting the estimates and the geostatistical confidence in the tonnage and grade estimates. Appropriate classification criteria should aim at integrating these concepts to delineate regular areas at similar resource classification.

ACS is satisfied that the geological modelling reflects the current geological information and knowledge. The location of the samples and the assay data are sufficiently reliable to support resource evaluation. The sampling information was acquired primarily by core and reverse circulation drill holes. Drilling samples were from sections spaced at 25 metres.

ACS considers that blocks in the Kate deposit estimated during pass one and from at least 4 drill holes could be assigned to the Indicated category. All other estimated blocks were assigned to the Inferred category within the meaning of the CIM Definition Standards.

## **14.12 MINERAL RESOURCE STATEMENT**

CIM Definition Standards 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 eventual economic extraction” requirement generally implies that the quantity and grade estimates meet certain economic thresholds and that the mineral resources are reported at an appropriate cut-off grade taking into account extraction scenarios and processing recoveries. In order to meet this requirement, ACS considers that most of the Kate deposit is amenable for open pit mining. The deposit is flat lying and occurs near surface. Most of the mineralization is within 60 m of the surface.

In order to determine the quantities of material satisfying “reasonable prospects for economic extraction”, ACS assumed a minimum mining cut off of 35 g/t silver representing an approximate

**Mineral Resource Estimate for the Silver Cliff Property, Custer County, Colorado, USA**

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mining and processing cost of US\$16 per tonne. The reader is cautioned that there are no mineral reserves at the Silver Cliff Property.

ACS is unaware of any known environmental, permitting, legal, title, taxation, socio-economic, marketing, political issues that may adversely affect the Mineral Resources presented in this Report.

ACS considers that the blocks with grades above the cut-off grade satisfy the criteria for “reasonable prospects for economic extraction” and can be reported as a Mineral Resource. Mineral resources for the Kate deposit on the Silver Cliff Property are summarized in Table 14.10.

**Table 14.10 Kate deposit mineral resource statement at 35 g/t silver cut-off, effective April 15, 2018**

classification	Tonnes	grade Ag (g/t)	ounces silver
Indicated	2,064,000	84	5,560,900
Inferred	3,172,000	70	7,143,900

- (1) *Mineral Resources which are not Mineral Reserves do not have demonstrated economic viability.*
- (2) *The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues.*
- (3) *The Inferred Mineral Resource in this estimate has a lower level of confidence than that applied to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of the Inferred Mineral Resource could be upgraded to an Indicated Mineral Resource with continued exploration.*
- (4) *The Mineral Resources in this report were estimated using the Canadian Institute of Mining, Metallurgy and Petroleum (CIM), CIM Standards on Mineral Resources and Reserves, Definitions and Guidelines prepared by the CIM Standing Committee on Reserve Definitions and adopted by the CIM Council.*

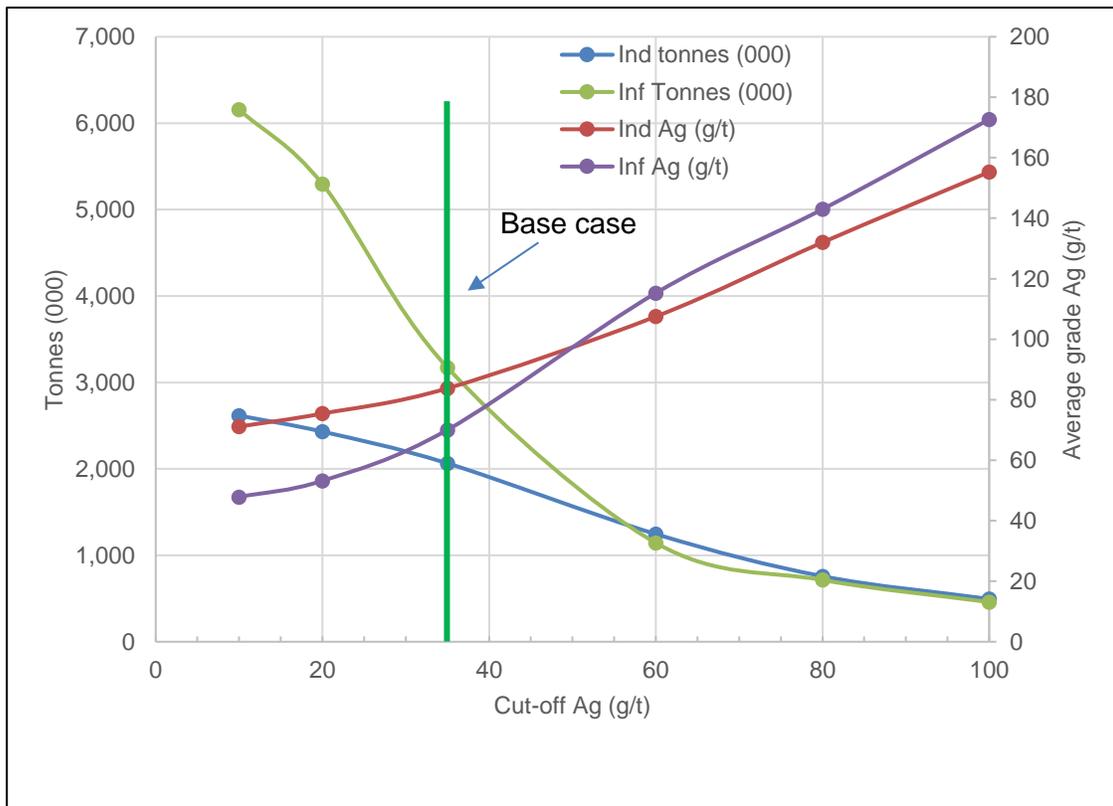
Mineral resources were estimated in conformity with generally accepted CIM “Estimation of Mineral Resource and Mineral Reserve Best Practices” Guidelines. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The Mineral Resources may be affected by subsequent assessment of mining, environmental, processing, permitting, taxation, socio-economic and other factors.

Mineral reserves can only be estimated based on the results of an economic evaluation as part of a preliminary feasibility study or feasibility study. As such, no Mineral Reserves have been estimated by ACS. There is no certainty that all or any part of the mineral resources will be converted into a mineral reserve.

Inferred mineral resources have a great amount of uncertainty as to their existence and as to whether they can be mined legally or economically. It is safe to assumed that the majority of the Inferred mineral resources could be upgraded to a higher category with additional exploration. Mineral resources that are not mineral reserves have no demonstrated economic viability.

### 14.13 GRADE SENSIVITY ANALYSIS

The mineral resources at the Kate deposit are sensitive to the selection of the reporting cut-off grade. To illustrate this sensitivity, the global model quantities and grade estimates of the indicated and inferred resource are presented in Figure 14.6. The reader is cautioned that the grade and tonnages presented in these figures should not be misconstrued as 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.



Source: ACS 2018

Figure 14.6 Grade tonnage curve for indicated and inferred mineral resources

## 15.0 ADJACENT PROPERTIES

While the ground near the Silver Cliff Property is currently held by others, none of the properties are currently active.

## 16.0 OTHER RELEVANT DATA & INFORMATION

There is no other relevant data or information relative to the scope of this report.

## **17.0 INTERPRETATIONS & CONCLUSIONS**

The Kate silver deposit on the Silver Cliff Property, near the town of Silver Cliff Colorado, forms a cohesive near surface, flat lying, silver deposit that could be amenable to open pit mining. The deposit has been explored extensively in the past by various companies with a total of 285 historical drill holes being drilled in the deposit area alone.

The surface and mineral rights over the deposit are complex and governed by various option agreements signed by Viscount between 2014 and 2018. The effective property area now covers over 700 hectares.

Mineralization at the Kate deposit in the form of secondary silver mineralization locally associated with manganese oxides in the lower, highly fractured Tertiary-age rhyolite flows and flow breccias. The mineralized zones are conformable to stratigraphy and are encountered from surface to depths varying from approximately 40 to 50 m. Aside from the stratigraphic and fracture controls, the location of silver mineralization appears to have been at least partially controlled by the geometry of volcanic glass or obsidian lenses, as better silver grades are encountered just above or on the margins of them, and not where the flows overlie the rhyolite tuff, breccia and conglomerate units.

Viscount began exploring the property in 2016 and has carried out two drilling programs aimed at confirming and verifying the historical drill results. The Viscount drill programs were successful in confirming the presence of high grade silver associated with the Kate deposit in grades similar to what had been reported by past drilling campaign and the drilling confirmed that some of the historical drill holes could be used in the resource estimate presented in this report.

Based on the validated historical drill holes and the Viscount drilling, ACS estimated that the Kate deposit on the Silver Cliff Property contained 2.1 million tonnes of indicated mineral resources grading 84 g/t silver and 3.2 million tonnes of inferred mineral resources grading 70 g/t silver. The deposit remains open to the west and possibly to the northeast where only a limited amount of drill testing has been conducted.

The mineral resources were estimated in conformity with generally accepted CIM “Estimation of Mineral Resource and Mineral Reserve Best Practices” Guidelines. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. The Mineral Resources may be affected by subsequent assessment of mining, environmental, processing, permitting, taxation, socio-economic and other factors.

## 18.0 RECOMMENDATIONS

Further work is recommended for the Silver Cliff Property. ACS recommends that Viscount initiates a preliminary metallurgical testing program to determine the potential recovery of silver from the mineralization at the Kate deposit. Contingent on positive results from the metallurgical sampling, ACS also recommends that Viscount carry out a drill program to upgrade the inferred mineral resource to indicated category. A total of 20 holes would be required to convert most of the inferred mineral resource to indicated category.

All historical drill holes should be tied into the UTM grid by surveying all collars near the Kate deposit. ACS also recommends that Viscount collect more samples for bulk density determinations.

ACS recommends that Viscount prepare a Preliminary Economic Assessment (PEA) for the Kate deposit.

The total estimated cost of combined phased program is US\$800,000 as outlined in Table 18.1.

**Table 18.1 Recommended Work Program**

Item	Cost (US\$)
Phase 1 Program	
Metallurgical sampling (4 composites)	\$80,000
<b>Total Phase 1 Program</b>	<b>\$80,000</b>
Phase 2 contingent on positive result of Phase 1	
Drilling	
Assays	\$100,000
Labour (including surveying)	\$150,000
Drilling 20 holes for 1,600 m	\$260,000
Expense and accommodations	\$60,000
Pad rehabilitation	\$10,000
Bulk density sampling	\$10,000
Preliminary Economic Assessment	\$130,000
<b>Total Phase 2 Program</b>	<b>\$720,000</b>
<b>Total Budget</b>	<b>\$800,000</b>

## **19.0 REFERENCES**

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## 20.0 UNITS OF MEASURE, ABBREVIATIONS AND ACRONYMS

### 20.1 UNITS OF MEASURE

Table 20.1 Units of Measure

'	Foot
"	Inch
µm	Micron (micrometre)
AT	Assay ton
C\$	Canadian dollars
cm	Centimetre
dmt	Dry metric tonne
ft	Foot
ft <sup>3</sup>	Cubic foot
g	Gram
hr	Hour
ha	Hectare
hp	Horsepower
kg	Kilogram
km	Kilometre
km <sup>2</sup>	Square kilometre
kt	Kilotonnes
kW	Kilowatt
KWh	Kilowatt-hour
L	Litre
lb or lbs	Pound(s)
m	Metre
M	Million
m <sup>2</sup>	Square metre
m <sup>3</sup>	Cubic metre
Mt	Million tonnes
°C	Degree Celsius
oz	Troy ounce
ppb	Parts per billion
ppm	Parts per million
s	Second
t	Metric tonne
US\$	US dollars
W	Watt

## 20.2 ABBREVIATIONS AND ACRONYMS

Table 20.2 Abbreviations & Acronyms

% or pct	Percent
AA	Atomic absorption
AAS	Atomic absorption spectrometer
Ag	Silver
Au	Gold
BLM	Bureau of Land Management
CIM	Canadian Institute of Mining
COG	Cut-off grade
ICP	Inductively coupled plasma
ID <sup>2</sup>	Inverse distance squared
masl	Metres above sea level
N, S, E, W	North, South, East, West
NAD	North American Datum
NI 43-101	National Instrument 43-101
NN	Nearest neighbour
NSR	Net Smelter Return
NTS	National Topographic System
PPM	Parts per million
QA/QC	Quality assurance/quality control
QP	Qualified Person
SG	Specific gravity
UTM	Universal Transverse Mercator
X, Y, Z	Cartesian coordinates, also Easting, Northing and Elevation