

## ASX ANNOUNCEMENT

### Pickle Crow Gold Project, Canada

# Resource increases 71% to 1.7 Moz

Updated estimate comprises a high-grade Inferred Resource of 1,470,000oz at 10.1 g/t gold (up 470,000oz) and a maiden BIF-hosted JORC Inferred Resource of 240,000oz at 3.7 g/t gold

### Key Points

- The total Inferred Resource at the Pickle Crow project has increased by 710,000 oz to 1.7 Moz
- The Inferred Resource comprises a high-grade component of 1,470,000 oz at 10.1g/t, an increase of 47%
- An additional broad shallow Inferred Resource hosted within the adjacent Banded Iron Formation (BIF) totals 240,000 oz at 3.7 g/t, and is potentially amenable to bulk mining methods
- The Resource growth has come at a cost of just A\$15.25/oz, reflecting an outstanding return on the recently completed 45,000m drilling campaign
- The subsequent 50,000m drill program is underway and is already generating strong results, pointing to future Resource growth. Intersections returned outside of the 1.7 Moz Inferred Resource include:
  - 1.8m @ 16.6 g/t gold from 61.5m AUDD0138 (New Structure)
  - 3.3m @ 8.0 g/t gold from 836.4m in AUDD0166 (New Structure)
  - 1.8m @ 21.2 g/t gold from 838mm in AUDD0166W1 (New Structure)
  - 4.9m @ 4.7 g/t gold from 514m in AUDD0178 (New Structure); Including 2.1m @ 10.4 g/t
  - 1.0m @ 14.1 g/t gold from 432m in AUDD0179 (New Structure)
- Follow up drilling at the Carey discovery is in progress, with results expected this quarter
- Auteco is fully-funded for its growth strategy, with \$26.8M cash on hand at March 31 2021

Mineralisation Domain	Lower Cut-off	Tonnes (Mt)	Gold Grade (g/t)	Gold (Million oz)	Variance to September 2020 Resource
Quartz Lodes	3.5g/t	4.5	10.1	1.47	+ 0.47Moz
Banded Iron	2.0g/t	2.1	3.7	0.24	+ 0.24Moz
<b>TOTAL</b>		<b>6.6</b>	<b>8.1</b>	<b>1.71</b>	<b>+ 0.71Moz</b>

Auteco Inferred Mineral Resource Estimate as at 30 June 2021. Please refer to Appendix B JORC Table 1 for details of the Inferred Resource estimate. Note that all numbers are rounded.

**Auteco Minerals (ASX: AUT) is pleased to announce that the Inferred Mineral Resource estimate at its Pickle Crow Project in Canada has increased by 71% to 1.7 million ounces of gold.**

The outstanding result includes a high-grade vein-hosted Resource of 4.5 million tonnes at 10.1 g/t for 1.47 Moz of gold, an increase of 47 per cent.

In addition, the new estimate contains a maiden JORC Inferred Resource of 2.1Mt at 3.7 g/t for 242,000 oz of gold hosted within the adjacent Banded Iron Formation (BIF).

Auteco is also pleased to report that recent drilling done since the cut-off for the Resource update has intersected more high-grade gold outside the Resource.

Auteco Executive Chairman Ray Shorrocks said: “To grow the high-grade Resource by almost 50 per cent by adding 470,000oz at more than 10 g/t is an exceptional result. Achieving that at a cost of around A\$15/oz is even better.

“Pickle Crow now has genuine scale and is truly high-grade by any measure. These factors highlight the quality of the mineralised system.

“And the good news continues to flow, with the new drilling program already intersecting significant high-grade mineralisation outside the updated Resource envelope.”

The Resource update is the successful culmination of the September 2020 exploration and growth program, which was underpinned by 45,000m of drilling. This campaign resulted in the addition of 710,000oz of gold at a cost of A\$15.25 per Resource ounce, in addition to the discovery of numerous new veins and mineralised zones such as Carey.

The Pickle Crow mine was one of Canada’s highest grade historical producers, with 1.5 Moz of gold produced at a grade of 16.1 g/t between 1935 and 1966. Gold was sourced from narrow high-grade vein quartz carbonate veins mined from underground. This style of mineralisation forms the bulk of the Inferred Resource, accounting for 1.47 Moz at 10.1 g/t gold.

A review of historic data in addition to recent drill intersections highlighted the potential of mineralisation hosted in Banded Iron Formation. This mineralisation style characteristically contains gold in alteration halos surrounding vein arrays, resulting in relatively broad intersections potentially amenable to bulk mining methods. Assessment of the BIF hosted mineralisation resulted in a maiden JORC Inferred Resource of 242,000 oz at 3.7 g/t gold.

The mineral Resource estimation was prepared in accordance with the JORC Code (2012 edition) by reputable Australian firm Cube Consulting Pty Ltd with oversight from Auteco personnel.

## **ABOUT THE GROWTH AND EXPLORATION PROGRAM**

The strategic work program completed between September 2020 and July 2021 (Figure 1) has reached its conclusion after the successful delivery of all key objectives. The drilling phases of the work program included a total of 166 diamond holes drilled for 45,522m.

In June 2021, the stage two 50,000m drill campaign commenced. To date 5,622m of drilling for 14 diamond drill holes have been completed from the new program. Assay results have been partially received for 5 holes, and assays are yet to be received for a further 9 holes. There are currently four drill rigs on site.



Figure 1: AuTECO strategic work plan, key work phases and progress to date (this forward work plan is indicative).

The key highlights of the strategic work program (Figure 2) include:

- Successful upgrade of the Resource to 1 Moz at 11.3 g/t gold in September 2020
- Discovery of multiple previously unknown mineralised structures proximal to the Resource
- Step-out extensions of known mineralised structures that form the current Mineral Resource
- Commencement of concept-stage exploration target testing, which has yielded immediate results with the Carey discovery that returned an intersection of 20.4m @ 5.3 g/t gold
- The addition of 710,000 ounces to the Inferred Resource in July 2021
- Continued growth of the high-grade underground Resource, which now totals 4.5Mt at 10.1 g/t for 1.47 Moz (this announcement)

AUTECO STRATEGIC WORK PROGRAM – September 2020 to July 2021	
FOCUS	DELIVERED HIGHLIGHTS TO DATE
Mid Year 2020 Resource	<ul style="list-style-type: none"> <li>Resource upgrade to <b>1Moz</b> gold at a grade of <b>11.3g/t</b></li> <li>Prepared in accordance with the JORC Code (2012 Edition)</li> </ul>
Near Mine Extension	<ul style="list-style-type: none"> <li>~<b>30,000m</b> of near mine extension drilling completed</li> <li>Successfully <b>discovered</b> mineralised vein structures in the near-mine environment outside of the current Resource</li> <li>Continued to identify <b>extensions</b> to the known Resource veins</li> <li>Key drill results delivered <b>outside</b> of the current Resource included:            0.6m @ <b>313.0g/t</b>, 0.6m @ <b>42.9g/t</b>, 1.0m @ <b>34.9g/t</b>, 5.6m @ <b>33.4g/t</b>, 1.2m @ <b>29.7g/t</b>, 1.5m @ <b>26.6g/t</b>, 1.3m @ <b>21.4g/t</b>, 1.5m @ <b>19.3g/t</b>, 1.6m @ <b>19.2g/t</b>, 1.5m @ <b>19.3g/t</b>, 1.2m @ <b>11.9g/t</b>, 5.0m @ <b>9.5g/t</b>, 3.6m @ <b>8.2g/t</b>, 3.3m @ <b>8.0g/t</b>, 2.3m @ <b>7.8g/t</b>, 4.9m @ <b>7.5g/t</b>, 4.6m @ <b>7.5g/t</b>, 3.0m @ <b>7.4g/t</b></li> </ul>
Resource Definition	<ul style="list-style-type: none"> <li>~<b>10,000m</b> of definition drilling completed</li> <li>Infill drilling completed on some of the newly discovered veins and extensions</li> <li>This data forms the basis of the updated MY2021 Resource estimation</li> </ul>
Regional Exploration	<ul style="list-style-type: none"> <li>~<b>5,000m</b> of conceptual early stage exploration target testing completed</li> <li>Early success with the Carey Discovery (<b>20.4m @ 5.3g/t</b>)</li> </ul>
Mid Year 2021 Resource	<ul style="list-style-type: none"> <li><b>6.6Mt @ 8.1g/t gold for 1.71Moz</b></li> <li>Vein Resource of 4.5Mt @ 10.1g/t gold for 1.47Moz</li> <li>BIF Resource of 2.1Mt @ 3.7g/t gold for 0.24Moz</li> </ul>

Figure 2: Highlights delivered to date from the Auteco strategic work program (Sep 2020 to July 2021).

## FORWARD WORK PLAN

The forward work plan to the end of 2021 for the Pickle Crow project has been summarised into three key activity categories shown in Figure 3. The three-staged approach will continue to focus on exploration / growth, preparing for a year end Resource estimate and completing activities that potentially demonstrate a pathway to production for the Pickle Crow deposit.

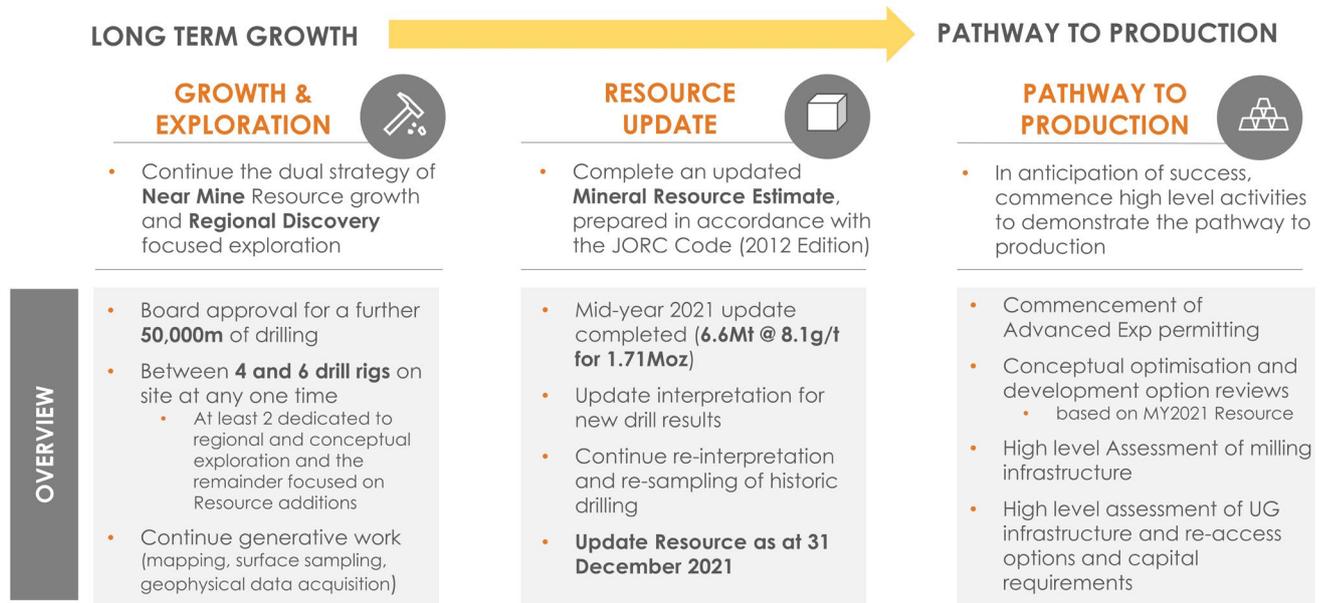


Figure 3: Auteco forward work plan to the end of 2021. Please note that timeframes are indicative.

## Growth & Exploration Program – Phase Two

Auteco has a compelling pipeline of exploration and growth drill targets (Figure 4), ranging from early-stage concepts through to advanced prospects with potential to generate additional Resources. Due to the strong success of the recent drill campaigns, the Company commenced an additional 50,000m of drilling in June 2021.

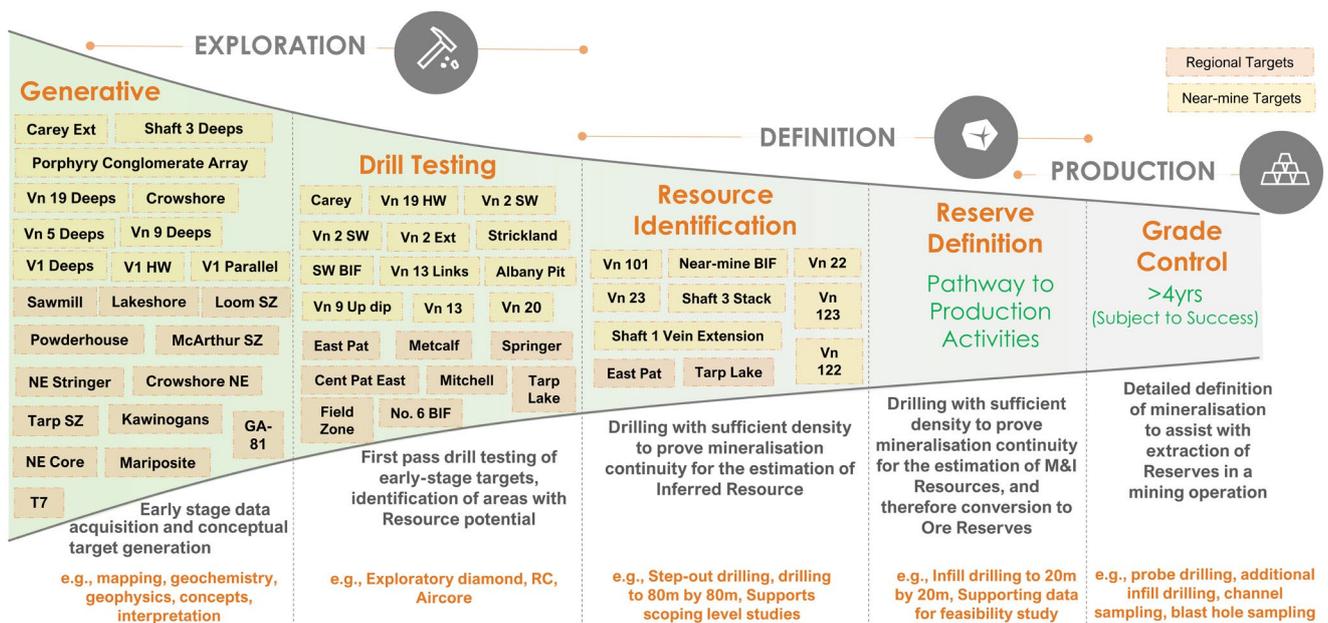


Figure 4: Exploration and growth pipeline for the Pickle Crow project.

The dual strategy of driving near-mine Resource growth combined with early-stage exploration targeting will continue to be the focus of the program.

## EXPLORATION AND GEOLOGICAL DETAIL – DRILL RESULTS

The Pickle Crow deposit is a typical Mesothermal narrow-vein high grade Archean orogenic gold deposit, with mineralised veins present within local structures formed within a broader Riedel shear zone. Historically between 1935 and 1966, 1.5 Moz of gold at a grade of 16.1 g/t was mined from more than 10 individual quartz reefs. To date >30 individual veins have been identified proximal to underground shaft infrastructure (Shaft 1, Shaft 3, and Albany Shaft). Exploration results have been grouped based on proximity to the three main shafts.

A plan map showing the collar locations of significant intersections in the near-mine area is presented in Figure 5.

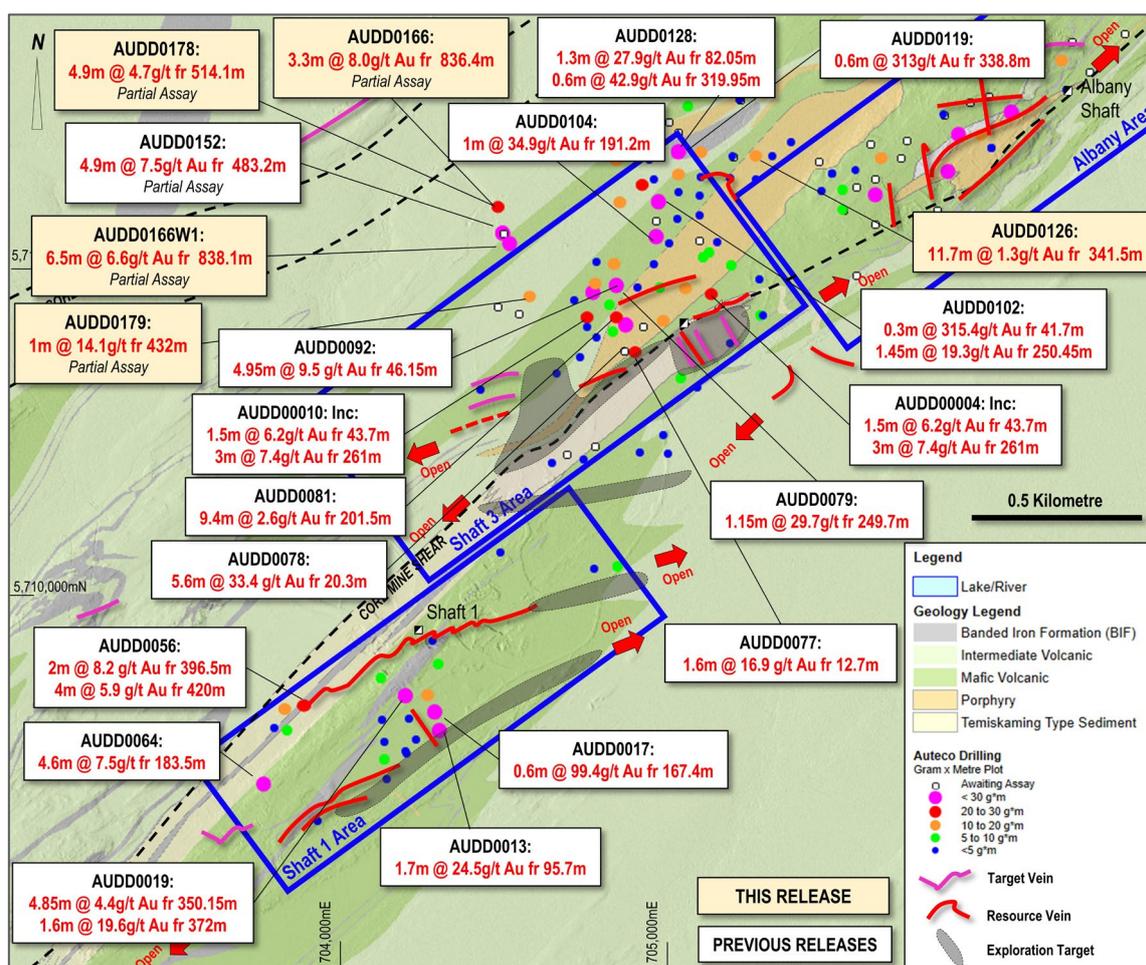


Figure 5: Surface plan showing location of significant intersections in the Shaft 1, Shaft 3 and Albany areas.

## Shaft 3 Area Exploration Drilling

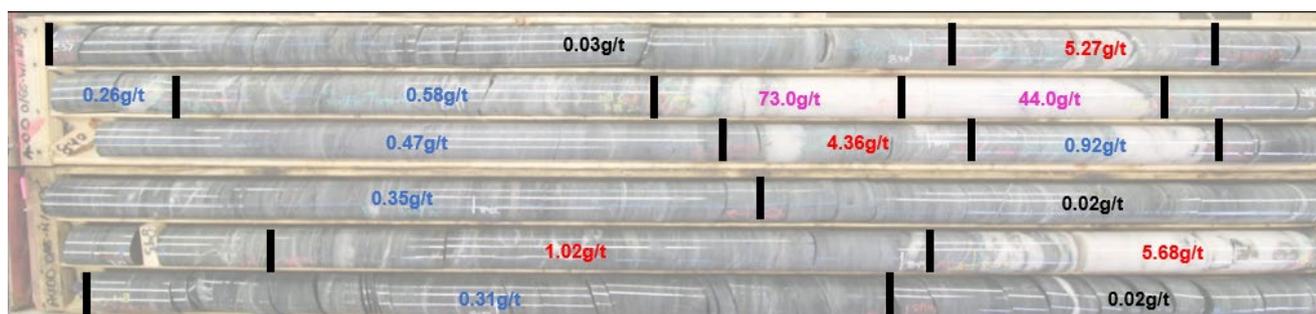
Drilling completed since June 2021 has continued to test the extent and continuity of newly discovered veins to the north-west of Shaft 3. Drilling proximal to a previously reported intersection of a newly discovered vein structure in hole AUDD0152<sup>1</sup> (4.9m @ 7.5 g/t gold) has continued to intersect veins that indicating continuity.

<sup>1</sup> Please refer to ASX release dated 16 June 2021 for details of the intersection in drill hole AUDD0152

Significant intersections returned from drilling north-west of Shaft 3 include:

- **3.3m @ 8.0 g/t gold** from 836.4m in AUDD0166 (New Structure)
- **1.8m @ 21.2 g/t gold** from 838mm in AUDD0166W1 (New Structure)
- **4.9m @ 4.7 g/t gold** from 514m in AUDD0178 (New Structure)  
Including 2.1m @ 10.4 g/t
- **1.0m @ 14.1 g/t gold** from 432m in AUDD0179 (New Structure)

Mineralisation in this area is the quartz-carbonate vein hosted style, as demonstrated in the core photographs of hole AUDD0166W1 (Figure 6). Please refer to Appendix A (Table 1) for details of drilling completed. Also refer to Appendix B, JORC Table 1 Section 2 for an isometric view of all drilling in the Pickle Crow mine area.



**Figure 6:** Hole AUDD0166W1 - New discovery. 838.05m to 844.5m. Multiple quartz-tourmaline-scheelite-gold veins up to 0.6m wide within sheared, sericite-carbonate altered, basalt unit. Interval 6.45m @ 6.6 g/t gold from 838.05m, including 1.75m @ 21.2 g/t Gold from 838.05m and 0.6m @ 58.6 g/t gold from 839.2m

## ABOUT THE MINERAL RESOURCE ESTIMATE

The Resource estimate as at 30 June 2021 is presented in Table 1. All Resources are classified as inferred.

Mineralisation Domain	Lower Cut-off	Tonnes (Mt)	Gold Grade (g/t)	Gold (Million oz)	Variance to September 2020 Resource
Quartz Lodes	3.5g/t	4.5	10.1	1.47	+ 0.47Moz
Banded Iron	2.0g/t	2.1	3.7	0.24	+ 0.24Moz
<b>TOTAL</b>		<b>6.6</b>	<b>8.1</b>	<b>1.71</b>	<b>+ 0.71Moz</b>

**Table 1:** Pickle Crow Mineral Resource estimate as at 30 June 2021. All Resources are classified as Inferred. Please note that figures may not add up due to rounding. Mineral Resources that are not Ore Reserves have not demonstrated economic viability and an Inferred Mineral Resource carries a lower level of confidence than that applying to Indicated Mineral Resource and must not be converted to an Ore Reserve. The estimate of Mineral Resources may be materially affected by environmental, permitting, legal, title, taxation, socio-political, marketing, or other relevant issues. Mineral Resources are reported at a block cut-off grade of 3.5 g/t Au for the vein and 2.0 g/t Au for the BIF domain. No minimum mining SMU parameters have been applied to the underground Inferred Mineral Resources. The average bulk density assigned to the quartz vein hosted mineralisation is 2.7 g/cm<sup>3</sup>.

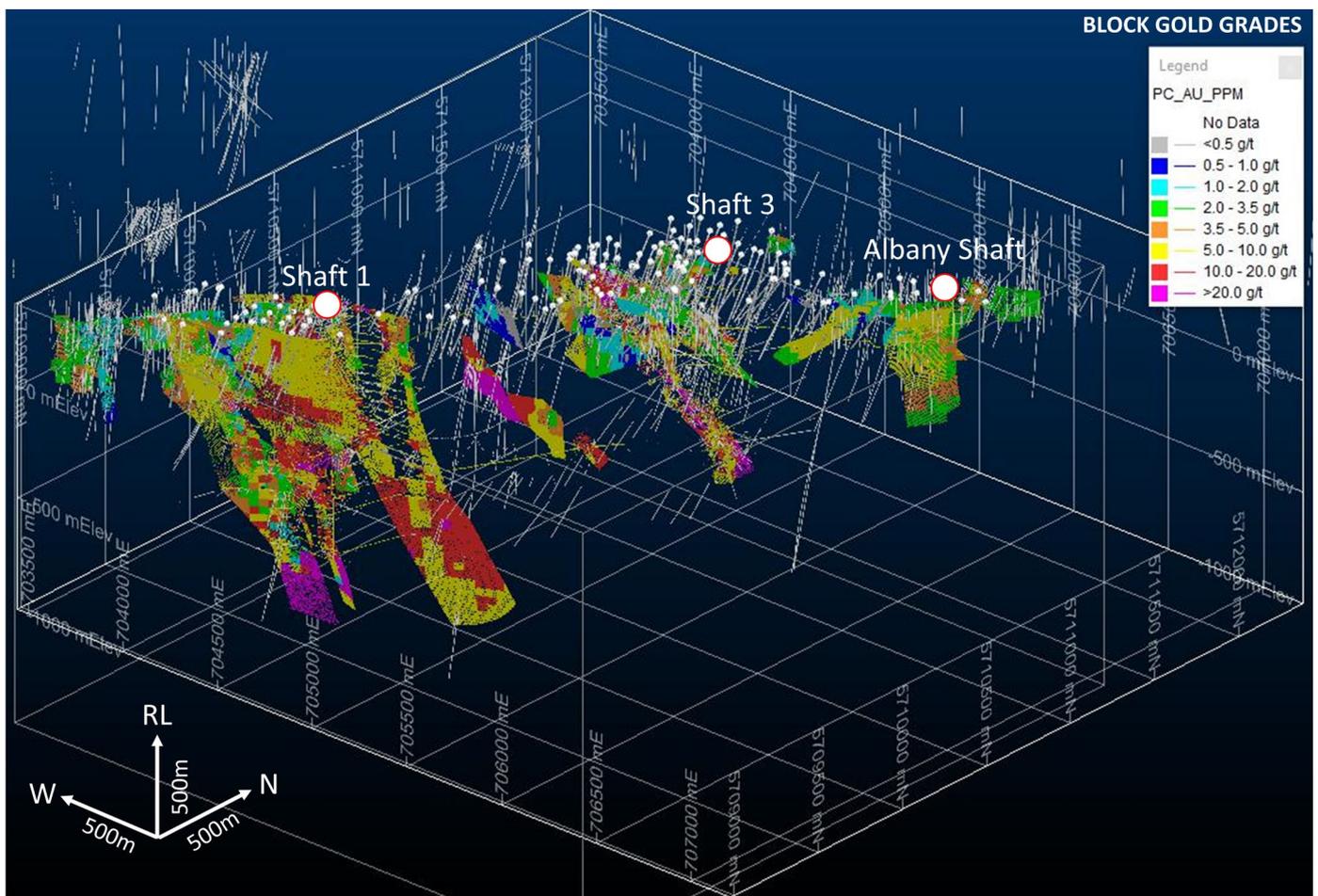
The Resource has been independently estimated by Cube Consulting Perth (see Competent Person statement). The estimate has been produced by 3D modelling of the lode systems and block model grade estimation using a combination of the 2D estimation modelling approach and 3D dynamic interpolation, both using Ordinary Kriging (OK) and Inverse Distance to the power of 2 (ID<sup>2</sup>). A full summary of the resource methodology and validation is included in the Appendix B JORC Table 1 Section 3.

All project resources have been classified as Inferred based on current drill spacing and the historical drill results, which will require further supporting verification drilling and QAQC insertion. It is anticipated that Infill drilling and verification drilling will support an increase in resource classification.

The updated resource differs from the previous Resource dated 1 September 2020 due to:

- Addition of new drilling information outside of the previous estimation domains and interpretations.
- Inclusion of the shallow mineralisation zones, including the BIF hosted mineralisation within the #1 Shaft area and Porphyry hosted mineralisation within the Albany shaft area.
- Updated geological model and high-grade plunge interpretation for some domains based on a detailed structural review completed by AUT geologists – 16 domains updated for the June 2021 MRE.
- Improved orebody modelling by using vein function modelling on 3D data vs the original sectional interpretation.
- Revised resource estimation methodology more suitable for narrow vein gold deposits.

The spatial distribution and gold grades of Inferred blocks in the mineral Resource estimate is shown in Figure 7.



**Figure 7:** Isometric image showing drill data density and distribution of the Inferred Mineral Resource block model. Blocks are coloured by gold grade. Grid spacing is 500m by 500m by 500m.

## Summary of JORC Table One

A summary of JORC Table 1 is provided below for compliance with the Mineral Resource and in-line with the requirements of ASX listing rule 5.8.1.

### Geology and Geological Interpretation

The Archean Pickle Crow Orebody consists of 91 separate high to medium grade, lode gold domains hosted across a variety of different lithologies ranging from Pickle Crow Basalts, through Banded Iron Formation and Porphyry units. There is sufficient confidence in the geological modelling of the orebody geometries for Inferred Resource Estimation, with variable confidence dependent on drilling density, geological confidence and historical QAQC.

The Mineral Resource sits within an area of 3,800m strike (in a NE direction) of the core mine trend and within an 800m section of stratigraphy and has been interpreted to extend at its maximum 1,500m below surface in close proximity to where the underground development stops.

### Drilling Techniques, Sampling and Assaying

Drilling included in the Resource Estimation at Pickle Crow consists of historical surface and underground drilling. Overall, 4,038 holes for 412,949m of dominantly NQ diamond drilling are incorporated into the database with 3,080 holes for 129,000m drilled from underground prior to 1988 and the remainder from surface. A total of 173 NQ Diamond drill holes for 46,389m have been completed by Auteco in 2020 and 2021 and have been incorporated into the June 2021 resource estimation.

Core was cut in half with one half retained as a reference, and the other sent for assay. Assays from diamond drilling post 1981 are Fire Assay results from various accredited Canadian laboratories. Historical assay methods prior to this are unknown but have been verified by duplicate sampling by historical operators at the project.

Post 2008 samples were dispatched to ALS Chemex for gold by 50g Fire Assay with atomic absorption finish. Samples greater than 5 g/t gold were reassayed by 50g Fire Assay with gravimetric finish. All samples greater than 10 g/t gold were additionally sent for pulp metallics (950g).

Auteco drilling samples were dispatched to AGAT laboratories for assay by 30g Fire Assay with atomic absorption finish. Samples greater than 5 g/t gold were reassayed by 50g Fire Assay with gravimetric finish. All samples greater than 0.2 g/t gold have additionally been sent for pulp metallics (1000g) but results have not yet been received.

### Estimation Methodology

The MRE has been produced by 3D modelling of the lode systems and block model grade estimation using a combination of 2D estimation modelling approach and 3D dynamic interpolation (DK), both using OK and ID<sup>2</sup>. The estimation methodology is briefly summarised as follows:

- The primary estimation domains are based on the 3D geological wireframing of quartz veins and BIF hosted mineralisation provided by Auteco. The domain interpretations were based on historical UG mining knowledge of the steeply dipping quartz veining known to host gold mineralisation from drill logging and descriptions of mapping and sampling.
- The mineralised domains acted as a hard boundary to control the June 2021 MRE.
- Drill hole sample data was flagged using domain codes generated from 3D mineralisation domains. Sample data was composited over the full downhole interval. There were consequently no residuals.

Intervals with no assays were assigned background grades for the compositing routine as these un-assayed intervals in the drill holes were assumed to be waste.

- Gold grade distributions within the estimation domains were assessed to determine if high grade cuts or distance limiting should be applied on a domain by domain basis. The influence of extreme grade values was reduced by top-cutting where required. The top cut levels were determined using a combination of top-cut analysis tools (grade histograms, log probability plots and CVs). Top cuts were reviewed and applied on a domain basis.
- The 2D estimation approach using OK was deemed appropriate for the very narrow, linear and continuous zones hosted by quartz veins. Interval composites were generated for the mineralised lode, which were then weighted by their respective widths to calculate an accumulation variable. The accumulation variable for gold was then used for variogram analysis and 2D interpolation of gold grades. The estimated 2D block values were then exported back into 3D space.
- Several quartz vein hosted domains show ribbon-like structures and although the overall dip and dip direction of most of the lodges are consistent, there are enough changes in geometry to require locally varying search ellipse and variogram directions. The dynamic anisotropy search feature in Surpac was used in which the search neighbourhood ellipse dip and dip direction are defined separately for each block approximating the orientation of each of the mineralised zones.
- For mineralised domains estimated using 2D OK method, variogram ranges and search distances were defined in a rotated horizontal plane. For the 3D DK method, variogram modelling was conducted to provide nugget, sill and range for 3 directions. Variogram maps were initially analysed in plan, east-west and north-south section to confirm continuity trends and to refine parameters for experimental variogram calculation.
- The data spacing has relied on a combination of recent and historic surface diamond drilling.

Block model validation was conducted by the following means:

- Visual inspection of block model estimation in relation to raw drill data on a section by section basis.
- Volumetric comparison of the wireframe/solid volume to that of the block model volume for each domain.
- A global statistical comparison of input and block grades, and local composite grade (by northing and RL) relationship plots (swath plots), to the block model estimated grade for each domain.

## Bulk Density

A bulk density was assigned based on test work completed by previous operator's PC Gold Inc. as follows:

- Mineralised quartz veins = 2.7g/cm<sup>3</sup>
- BIF hosted mineralisation = 3.21g/cm<sup>3</sup>
- Porphyry hosted mineralisation = 2.83g/cm<sup>3</sup>

## Classification

The Mineral Resource has been entirely classified as Inferred. The classification is based on the relative confidence in the mineralised domain countered by high nugget values, variable drill spacing, un-verifiable historical database and partial lack of historical QAQC.

## Mining Factors or Assumptions

Both open pit and underground mining is assumed due to the shallow nature of major mineralisation zones.

Extensive underground mining operations have previously taken place with historical documentation providing good background information for future mining considerations.

No rigorous application has been made of internal or external dilution for mining.

Initial metallurgical test work was completed by previous operators on the high-grade vein mineralisation at Pickle Crow and can be summarised as:

- Excellent total gold extractions to a maximum exceeding 99% through a combination of gravity and 48-hour cyanide leach bottle rolls
- Excellent gravity recoveries of up to 92.4% of total gold recovered by the Knelson Concentrator prior to cyanide leaching.

These results are in line with the historical performance of the Pickle Crow Gold mine which operated between 1935 and 1966 with recoveries averaging slightly over 98% recovered through a combination of gravity and cyanidation.

No environmental factors have been considered as part of the June 2021 MRE.

## Reporting Cut-Off Grade

A 3.5 g/t cut-off grade was used to report the Mineral Resources within the quartz vein mineralised domains, and a cut-off grade of 2.0 g/t was used for the Banded Iron Formation (BIF) mineralised domains. The cut-off grades are estimated to be the minimum grade required for economic extraction at current prices.

Given the depth, width and grade of the deposit Auteco Minerals considers that the mineralisation incorporated into the resource estimation has a reasonable prospect of eventually being mined. Particularly when considering the high-grade resources are close to existing underground infrastructure and in proximity to existing highways and commercial power lines. In addition, there is already a successful history of commercial production at the Pickle Crow Gold Mine which produced 1.5 Million oz @ 16.1 g/t Gold between 1935 and 1966 before eventual closure.

This announcement has been authorised for release by the Auteco Board.

For further information, please contact:

**Mr Ray Shorrocks**  
Executive Chairman  
Auteco Minerals Ltd  
+61 8 9220 9030

**Paul Armstrong**  
Media enquiries  
Read Corporate  
+61 8 9388 1474

## ABOUT AUTEKO MINERALS

Auteco Minerals Ltd (ASX: AUT) is an emerging mineral exploration company focused on advancing high-grade gold resources at the Pickle Crow Gold Project in the world-class Uchi sub-province of Ontario, Canada.

The Pickle Crow Gold Project currently hosts a JORC 2012 Mineral Resource of 1.7 Moz at 8.1 g/t gold, with a 50,000m drilling program underway to expedite Resource growth.

Pickle Crow is one of Canada's highest-grade gold mines – historically, producing 1.5 Moz at 16 g/t gold.

For further information regarding Auteco Minerals Ltd please visit the ASX platform (ASX: AUT) or the Company's website <https://www.autecominerals.com>

## COMPETENT PERSON STATEMENT

Certain Exploration Results referred to in this announcement were first reported in accordance with ASX Listing Rule 5.7 in the Company's announcements of 28/01/2020, 26/03/2020, 01/09/2020, 11/11/2020, 19/1/2021, 7/4/2021 and 16/6/2021. Auteco confirms that it is not aware of any new information or data that materially affects the information included in the original announcements. The Company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.

The information in this announcement that relates to new Exploration Results and the Mineral Resource Estimate is based on and fairly represents information and supporting information compiled by Mr Marcus Harden, who is a Member of the Australasian Institute of Geoscientists. Mr Harden is an employee of the Company and has sufficient experience in the style of mineralisation and type of deposit under consideration and qualifies as a Competent Person as defined in the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Harden holds securities in Auteco Minerals Limited and consents to the inclusion of all technical statements based on his information in the form and context in which it appears.

The information in this announcement that relates to the Mineral Resource Estimate is based on and fairly represents information and supporting information compiled by Mr Brian Fitzpatrick. Mr Fitzpatrick is a full-time employee of Cube Consulting Pty Ltd, who specialises in mineral resource estimation, evaluation and exploration. Neither Mr Fitzpatrick nor Cube Consulting Pty Ltd holds any interest in Auteco Minerals Ltd, its related parties, or in any of the mineral properties that are the subject of this announcement. Mr Fitzpatrick is a member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person (or "CP") as defined in the 2012 Edition of the Australian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code). Mr Fitzpatrick has reviewed the contents of this ASX announcement and consents to the inclusion in this announcement of all technical statements based on his information in the form and context in which they appear.

## DISCLAIMER

References to previous ASX announcements should be read in conjunction with this release.

## FORWARD LOOKING INFORMATION

Various statements in this announcement constitute statements relating to intentions, future acts, and events. Such statements are generally classified as "forward looking statements" and involve known and unknown risks, uncertainties and other important factors that could cause those future acts, events, and circumstances to differ materially from what is presented or implicitly portrayed herein. The Company gives no assurances that the anticipated results, performance, or achievements expressed or implied in these forward-looking statements will be achieved.

## APPENDIX A: DRILLING RESULTS

**TABLE 1: Significant Intercept Table – Auteco Drilling**

Cut-off grade of 1 g/t Gold allowing for 1m internal dilution (NSI – No significant Intercept). All cords in UTM NAD 83 z15

Hole No.	Easting	Northing	Elevation	Azimuth	Dip	Drilled Length (m)	From (m)	To (m)	Width (m)	Assay (g/t)	Comment
AUDD0121	705309	5711301	338	180	60	296	148.45	148.75	0.3	1.73	
AUDD0122	705095	5711315	337	180	62	447	155.2	156	0.8	1.23	
							341.9	343	1.1	11.3	
							348.5	348.8	0.3	11.7	
							373.5	374	0.5	8.56	
							395.5	395.8	0.3	1.12	
AUDD0123	704921	5710791	340	140	65	204	NSI				
AUDD0124	705025	5711114	340	180	55	255	196.8	197.1	0.3	12.9	
							204.45	204.75	0.3	1.58	
AUDD0125	705090	5711050	340	180	55	260	NSI				
AUDD0126	705261	5711307	338	180	62	444	44	45	1	1.55	
							77.8	78.1	0.3	2.37	
							85.1	85.7	0.6	1.05	
							341.5	353.2	11.7	1.29	
							372.75	375	2.25	2.16	
							385.6	386	0.4	1.47	
							409	410.25	1.25	1.25	
AUDD0127	705026	5711377	337	180	60	510	NSI				
AUDD0128	704919	5711220	337	175	60	399	82.05	83.35	1.3	21.43	
							106	106.3	0.3	1.38	
							319.95	320.55	0.6	42.9	
							368.7	369.5	0.8	1.13	
AUDD0129	705445	5711288	342	310	55	168	NSI				
AUDD0130	704959	5711109	339	180	55	303	NSI				
AUDD0131	705190	5711302	338	180	60	339	227.65	227.95	0.3	5.59	
AUDD0132	704930	5711362	337	160	60	519	294.5	294.85	0.35	1.39	
							314.15	315.3	1.15	1.33	
							322	323.25	1.25	2.04	
							437.6	437.9	0.3	1.24	
							489.15	490.15	1	1.64	
							505.65	506	0.35	2.03	
AUDD0133	705210	5711475	337	180	60	519	54.2	55.5	1.3	1.42	
							138.3	138.7	0.4	2.84	
							316.8	317.2	0.4	1.55	
							366.3	366.6	0.3	1.29	
							469.6	469.9	0.3	3.6	
							472.3	472.7	0.4	3.05	
AUDD0134	705635	5711299	358	200	60	345	10.4	11.05	0.65	6.83	Partial Assay

Hole No.	Easting	Northing	Elevation	Azimuth	Dip	Drilled Length (m)	From (m)	To (m)	Width (m)	Assay (g/t)	Comment
							54.3	57.6	3.3	4.67	
AUDD0135	705520	5711140	356	180	55	128	11	14.25	3.25	1.73	
							20	21	1	1.32	
							76.9	77.45	0.55	1.26	
AUDD0136	705560	5710945	347	210	55	102	NSI				
AUDD0137	705617	5711186	355	180	55	345	28.7	43.6	14.9	2.21	Partial Assay
							73.95	75.5	1.55	2.32	
							83	84	1	1.34	
							114	114.65	0.65	4.26	
AUDD0138	705837	5711257	350	210	55	258	61.5	63.2	1.8	16.6	
							96.5	93	6.5	4.64	
							105	106	1	1.13	
							110.5	113	2.5	3.96	
							124	124.65	0.65	4.24	
AUDD0139	705058	5711454	338	185	75	636	347.9	348.8	0.9	0.99	
							376.3	376.6	0.3	3.01	
							508.35	508.9	0.55	11.9	
							520.25	520.55	0.3	3.13	
							524.5	524.8	0.3	3.78	
AUDD0140	705210	5711475	337	195	75	587	187	188	1	2.61	
							544	544.95	0.95	1.2	
							547.5	547.8	0.3	7.01	
AUDD0141	706024	5711437	354	210	60	189	160.55	177	16.45	2.2	Partial Assay
AUDD0142	705802	5711140	347	180	55	133	NSI				
AUDD0143	705934	5711370	353	210	55	219	43.5	44.4	0.9	1.66	
							59.2	59.5	0.3	1.35	
							68.95	69.3	0.35	2.5	
							111.5	111.8	0.3	34.1	
							195.25	195.6	0.35	1.57	
AUDD0144	705954	5711484	360	330	60	141	Awaiting Assay				
AUDD0145	705820	5711430	361	210	55	221	39.1	40.45	1.35	3.66	Partial Assay
							46.05	47.05	1	2.94	
AUDD0146	705802	5711140	348	250	55	210	Awaiting Assay				
AUDD0147	705897	5711466	361	330	55	105	Awaiting Assay				
AUDD0148	705210	5711475	337	180	73	582	544.75	545.4	0.65	1.04	Partial Assay
AUDD0149	706177	5711593	350	180	55	138	40.85	43.35	2.5	4.5	Partial Assay
AUDD0150	705964	5711328	350	200	50	252	83.75	84.75	1	1.28	Partial Assay
AUDD0151	706257	5711557	345	145	55	168	Awaiting Assay				
AUDD0152	704504	5711072	338	160	63	765	466.05	467	0.95	1.89	Partial Assay
							483.2	488.1	4.9	7.5	
						inc:	483.5	485	1.5	17	
AUDD0153	706312	5711610	346	145	55	129	Awaiting Assay				
AUDD0154	706361	5711673	348	145	55	135	Awaiting Assay				
AUDD0155	705710	5711350	358	200	55	249	Awaiting Assay				

Hole No.	Easting	Northing	Elevation	Azimuth	Dip	Drilled Length (m)	From (m)	To (m)	Width (m)	Assay (g/t)	Comment
AUDD0156	705965	5711328	350	145	50	225	36.8	37.5	0.7	1.69	Partial Assay
AUDD0157	704999	5711407	337	180	76	672	Awaiting Assay				
AUDD0158	705868	5711368	356	210	55	348	54.7	59.25	4.55	2.44	
							68.25	68.55	0.3	1.23	
							87	87.5	0.5	1.09	
							103.2	104	0.8	1.61	
							105	106.9	1.9	1.4	
							108.9	109.3	0.4	2.31	
							111.5	112	0.5	1.64	
							112.8	118.6	5.8	16.16	
						inc:	116	118.15	2.15	39.34	
						120	120.5	0.5	1.15		
						122.65	123	0.35	3.12		
						128.6	130	1.4	1.19		
						152.75	153	0.25	3.02		
						159.3	159.65	0.35	2.39		
195	197	2	2.73								
214.85	215.15	0.3	3.55								
217	219.15	2.15	1.77								
290	290.65	0.65	5.31								
297.4	298.3	0.9	1.54								
AUDD0159	705690	5711298	358	200	55	291	Awaiting Assay				
AUDD0160	705602	5711341	356	200	55	274	Awaiting Assay				
AUDD0161	704776	5710431	342	175	55	257	Awaiting Assay				
AUDD0162	704694	5710407	342	175	55	222	Awaiting Assay				
AUDD0163	705559	5711210	358	180	55	301	Awaiting Assay				
AUDD0164	704485	5710851	340	160	57	585	Awaiting Assay				
AUDD0165	704504	5711072	338	165	72	108	Awaiting Assay				
AUDD0166	704489	5711151	338	161	66	847	836.40	839.65	3.25	8.03	Partial Assay
AUDD0166W1	704525	5711039	117	161	54	737	838.05	844.50	6.45	6.61	Partial Assay
						inc:	838.05	839.80	1.75	21.20	
						inc:	839.20	839.80	0.60	58.60	
AUDD0167	706648	5712082	345	320	50	144	Awaiting Assay				
AUDD0168	705615	5711100	351	180	55	267	Awaiting Assay				
AUDD0169	705146	5711502	338	180	78	621	587.20	587.55	0.35	2.27	Partial Assay
AUDD0170	706618	5712060	345	320	50	105	Awaiting Assay				
AUDD0171	705613	5711235	359	180	60	509	Awaiting Assay				
AUDD0172	706585	5712028	345	320	45	111	Awaiting Assay				
AUDD0173	704549	5710828	340	160	62	600	Awaiting Assay				
AUDD0174	706548	5711976	348	180	45	171	Awaiting Assay				
AUDD0175	706477	5711848	348	160	45	87	Awaiting Assay				
AUDD0176	705559	5711261	357	180	57	411	193.80	194.20	0.40	1.14	Partial Assay
AUDD0177	706205	5711651	347	180	60	282	Awaiting Assay				

Hole No.	Easting	Northing	Elevation	Azimuth	Dip	Drilled Length (m)	From (m)	To (m)	Width (m)	Assay (g/t)	Comment
AUDD0178	704489	5711151	338	160	57	861	514.05	518.90	4.85	4.70	Partial Assay
						inc:	514.05	516.10	2.05	10.43	
							590.60	592.00	1.40	1.06	
AUDD0179	704586	5710883	340	160	62	606	431.95	432.90	0.95	14.10	Partial Assay

## APPENDIX B - JORC CODE, 2012 EDITION

**Table 1 – JORC Code 2012 Edition**

**Section 1 Sampling Techniques and Data (Criteria in this section apply to all succeeding sections.)**

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling since 2008, quoted with PC- prefix is from PC Gold exploration with NQ diameter (47.6mm) drill core was recovered from drilling. Noramco drilling, CP- prefix is BQ diameter (36.5mm). All other quoted intercepts and the bulk of historical drilling data is of NQ diameter including Auteco drilling subject to this release (prefix AUDD**).</li> <li>The core was sawn in half following a sample cutting line determined by geologists during logging and submitted for analysis on nominal 1m (1ft for historical drillholes) intervals or defined by geological boundaries determined by the logging geologist.</li> <li>Samples from PC Gold holes (PC- prefix) post 2008 were submitted to ALS Chemex in Thunder Bay and North Vancouver for analysis. Samples were prepared for analysis using a jaw crusher which was cleaned with a silica abrasive between samples resulting in 90% of the sample passing through an 8 mesh screen. A split of the crushed sample weighing 1000g was then pulverised to 90% passing a 150 mesh screen. Sample pulps were analysed for gold by Fire Assay using 50g sample charge with atomic absorption spectroscopy (AAS) finish. If the returned assay result was equal to or greater than 5g/t then the sample was reassayed by Fire Assay with a gravimetric finish. Samples from historical diamond drilling programs conducted between 1981 and 2008 were dispatched to a variety of accredited laboratories in Canada for Fire Assay analysis. Historical drill results prior to 1981 are Fire Assay conducted by unknown laboratories (most likely the mine laboratory during the operational life of the Pickle Crow Mine) and with unknown preparation methods and assay charge, however previous operators have duplicated and verified results. Recent sampling by Auteco minerals on drill holes subject to this release (prefix AUDD**) were submitted to AGAT Laboratories, Thunder Bay for analysis. Auteco samples undergo the same preparation and analysis techniques previously used for PC Gold.</li> <li>All samples &gt;10g/t gold and samples collected from PC gold drilling (PC- prefix) suspected of nugget gold were additionally sent for pulp metallica analysis.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>Drilling quoted with PC- prefix is from PC Gold exploration with NQ diameter (47.6mm) drill core was recovered from drilling. Noramco drilling, CP- prefix is BQ diameter (36.5mm). All other drilling is NQ diameter including Auteco drilling subject to this release (prefix AUDD**).</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling quoted is NQ diamond core (including Auteco drilling subject to this release -prefix AUDD**) with the exception of Noramco drillholes (CP- prefix). RQD was</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<p>recorded for all diamond drilling as per industry standard. A review of the available diamond drill core RQD's from the Pickle Crow project (PC- prefix and recently completed Auteco drilling - AUDD* prefix) indicated that nearly all of the holes produced excellent recoveries with an average of &gt;90%. For drilling conducted by other operators recoveries are unknown although reports do not highlight significant core loss.</p> <ul style="list-style-type: none"> <li>A review of RQD results does not highlight a relationship between sample recovery and grade or highlight any sample bias due to loss of material.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>All PC Gold and Auteco samples (PC- and AUDD* hole prefix) were geologically logged. Lithology, veining, alteration, mineralisation and weathering are all recorded in the geology table of the drill hole database. Other historical drillholes have been similarly logged and records have been digitized from report format.</li> <li>Geological logging of Diamond Core samples is qualitative and descriptive in nature.</li> <li>All holes quoted have been logged in their entirety.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling quoted from PC Gold and Auteco exploration (PC- and AUDD* hole prefix) is .NQ diameter (47.6mm) drill core recovered from drilling. All other quoted intercepts are NQ diameter with the exception of Noramco drilling (CP- Prefix) which is BQ (36.5mm) diameter. The core was sawn in half following a sample cutting line determined by geologists during logging and submitted for analysis on nominal 1m (or 1ft) intervals or defined by geological boundaries determined by the logging geologist.</li> <li>This sampling technique is industry standard and deemed appropriate.</li> <li>PC Gold QA/QC protocols include the use of crush duplicates, ¼ core field duplicates, the insertion of certified reference materials (CRM's) including low, medium and high-grade standards and coarse blanks. This was accomplished by inserting the QA/QC samples sequentially in the drill core sample numbering system. One set of the four QA/QC types were inserted every 30 samples consisting of 1 crush duplicate, 1 ¼ split field duplicate, 1 CRM (altering between low, medium and high standard) and 1 blank. This resulted in approximately every seventh sample being a QA/QC sample. Auteco minerals (AUDD* prefix holes) follows the same QA/QC protocols but with CRM's and duplicates inserted every 25 samples. QAQC procedures are not disclosed in previous reporting but results are consistent with visual observations of mineralisation as recorded in the geological logs and qualitative proportions of logged veining and sulphide content. Post-Mining Pickle Crow Property operators employed the usual in-laboratory blanks, standards and duplicate analyses to ensure precision and accuracy of results. Whist there is no documentation available for earlier results sample duplicate verification has been conducted.</li> <li>Sample size is deemed industry standard for Orogenic Gold deposits.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were submitted to ALS Chemex in Thunder Bay and North Vancouver for analysis. Samples were prepared for analysis using a jaw crusher which was cleaned with a silica abrasive between samples resulting in 90% of the sample passing through an 8 mesh screen. A split of the crushed sample weighing 1000g was then pulverized to 90% passing a 150 mesh screen. Sample pulps were analysed for gold by Fire Assay using 50g sample charge with atomic absorption spectroscopy (AAS) finish. If the returned assay result was equal to or greater than 5g/t then the sample was reassayed by Fire Assay with a gravimetric finish. . Samples from</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<p>historical diamond drilling programs conducted between 1981 and 2008 were dispatched to a variety of accredited laboratories in Canada for Fire Assay analysis. Historical drill results prior to 1981 are Fire Assay conducted by unknown laboratories (most likely the mine laboratory during the operational life of the Pickle Crow Mine) and with unknown preparation methods and assay charge, however previous operators have duplicated and verified results. Recent sampling by Auteco minerals on drill holes subject to this release (prefix AUDD**) were submitted to AGAT Laboratories, Thunder Bay for analysis. Auteco samples undergo the same preparation and analysis techniques previously used for PC Gold.</p> <ul style="list-style-type: none"> <li>In addition to the Company QAQC samples (described earlier) included within the batch the laboratory included its own CRM's (Certified Reference Materials), blanks and duplicates.</li> <li>Sample assay results continue to be evaluated through control charts, log sheets, sample logbook and signed assay certificates to determine the nature of any anomalies or failures and failures were re-assayed at the laboratory. Check assaying was also conducted on 1 in every 20 samples. QAQC protocols are unknown for historical drill programs (without the PC- hole prefix).</li> <li>QA/QC work is industry standard and acceptable levels of accuracy and precision have been established.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Historical significant intersections quoted have been verified by Independent Geological Consultants Micon International Limited. For more details see document 'Updated Mineral Resource Estimate for the Pickle Crow Property, Patricia Mining Division, Northwestern Ontario, Canada' NI-43-101 dated 15 June 2018 and available from System for Electronic Document Analysis and Retrieval (<a href="http://www.sedar.com">www.sedar.com</a>) for First Mining Inc.</li> <li>There are no twinned holes in the dataset but a comparison of the results of different drilling generations showed that results were comparable. In addition previous operators have duplicated and verified results by re-sampling historical core.</li> <li>For PC Gold drilling (PC- prefix), once all logging data was completed, core marked up, logging and sampling data was entered directly into the Gems Logger program (an MS Access-based database and stored on the onsite server. At approximately weekly intervals the server onsite was synchronised with the main server in Thunder bay. Only one individual was responsible for synchronising the field and office databases. Auteco records new drilling data in Excel spreadsheet format synchronized with the Auteco server in Perth, Australia.</li> <li>No adjustments were made to assay data but the procedure to determine which gold assay to enter into the database is as follows. If a pulp metallic assay was performed it was used. If a pulp metallic assay was not performed, then a gravimetric assay was used. If a gravimetric assay was not performed, then the AAS assay was used. If re-assays were performed then the first analysis was used unless a QA/QC investigation proved that the first assay was suspect, in which case the second analysis was then used.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>Upon completion of PC Gold drillholes collars (PC Gold prefix) were surveyed by third party contractors Delta Surveying and J.D.Barnes of Thunder Bay to with +/- 1m using an SX Blue. For all other drilling hole collars were converted from local grids or digitised from georeferenced maps. Where possible these historical surface drillholes have been re-located, surveyed and verified in the field. Drillhole locations are also recorded by the Ontario Ministry of Northern Development and Mines in freely available GIS datasets. Auteco drilling</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>(AUDD* prefix) has been surveyed with a hand-held GPS to an accuracy of less than 3m.</p> <ul style="list-style-type: none"> <li>A variety of down hole survey tools have been used on the property. All holes were surveyed at 50m intervals while drilling using an EZY Shot magnetic compass based tool supplied by the drillers. In conjunction with this, all holes were surveyed after completion with a non-magnetic down-hole instrument. A variety of tools were trialled including Maxibore tool provided by Reflex Instruments, a Devifelix tool operated by TECH Directional services and an SPT North Seeking Gyro. For Auteco drilling subject to this release down hole surveys have been conducted by a REFLEX North Seeking Gyro. For further historical details of survey reproducibility and tools used please refer to document 'Updated Mineral Resource Estimate for the Pickle Crow Property, Patricia Mining Division, Northwestern Ontario, Canada' NI-43-101 dated 15 June 2018 and available from System for Electronic Document Analysis and Retrieval (<a href="http://www.sedar.com">www.sedar.com</a>) for First Mining Inc. For all drilling not conducted by PC Gold (lacking the PC- prefix) surveys were conducted during drilling with hole orientation recorded by the geologist in the field. Downhole surveys of dip are recorded by azimuths away from the collar are generally lacking.</li> <li>All location data is in UTM grid (NAD83 Zone 15) except where noted.</li> <li>Topographic Control for PC Gold and Auteco drilling (PC- and AUDD* prefix) is from a DTM created generated from a LIDAR survey completed in 2008 and are to an accuracy of &lt;1m and verified by drill collar surveys. For all other collar data elevation was estimated from contours provided from SRTM. Topographic control for underground drillhole collars has been digitised from level plans or converted from mine grids. All surface collars have now been projected to a DTM generated from a LIDAR survey completed in 2008 and are to an accuracy of &lt;1m.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing, and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Due to the nature of mineralisation the hole spacing is highly variable and of a progressive exploration in nature.</li> <li>Data spacing is considered sufficient to establish geological and grade continuities for mineral resource estimation at the Inferred Category</li> <li>No sample compositing was applied.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>Drill hole orientations were designed to test perpendicular or sub-perpendicular to the orientation of the intersected mineralisation. Drilling was typically oriented perpendicular to the trend of geophysical anomalism and the mapped strike and dip of observed mineralisation on surface and elsewhere in the project area.</li> <li>Due to the density of drilling and the orientation of drilling perpendicular to mineralised bodies there is limited bias introduced by drillhole orientation.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>For PC Gold and Auteco drilling (PC- and AUDD* prefix), once the core samples are cut, bagged and sealed with zip ties, ten samples are put into rice bags which are sealed and secured with numbered security tags. Once samples arrive at the laboratory the security tags and corresponding samples were verified against onsite logs. Prior to shipment samples are stored in a locked building onsite. Site is always occupied, and no samples are left at the project during field breaks. For all other drillholes the measures taken to ensure sample security are unknown.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>An audit and review of sampling techniques and data was conducted as part of NI-43-101 resource estimation by Independent Consultants Micon International in 2018. Please refer to document 'Updated Mineral Resource Estimate for the Pickle Crow Property, Patricia Mining Division, Northwestern Ontario, Canada' NI-43-101 dated 15 June 2018 and available from System for Electronic Document Analysis and Retrieval (<a href="http://www.sedar.com">www.sedar.com</a>) for First Mining Inc.</li> </ul>

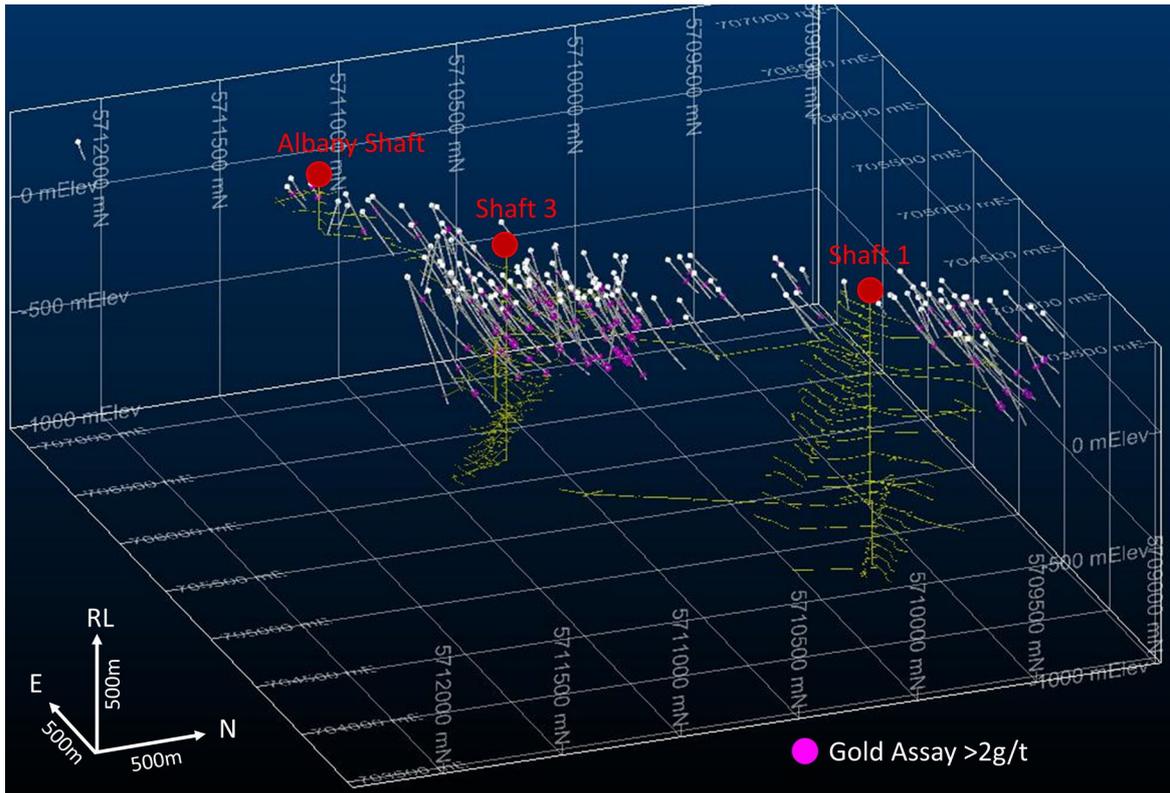
## Section 2 Reporting of Exploration Results (Criteria listed in the preceding section also apply to this section)

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The mineral concessions of the Pickle Crow project consist of 106 patented mining claims covering 1,712ha and 88 contiguous, unpatented claims covering approximately 14,048ha. Of the 106 patented claims 98 (the Pickle Crow Lease) are held in the name of Teck Cominco Limited (Teck) and 8 are held in the name of PC Gold. The unpatented claims are held in the name of PC gold. PC Gold has a lease on the 98 patented claims held by Teck which expires in 2067. These leasehold claims are subject to two net smelter return (NSR) royalties totalling 1.25%. The other 8 patented claims (the Crowshore Patents), plus certain unpatented claims are subject to NSR royalties ranging from 2% to 3%. A full list of tenements along with details of relevant NSR's as they pertain to individual properties is given in Auteco ASX releases dated: 28/01/2020 and 17/02/2020. An additional 600 claims were staked by Auteco subsidiary, Revel Resource (JV) Ltd. and are subject to the terms of the Earn-In-Arrangement.</li> <li>Auteco has entered into an agreement to acquire up to 80% of the Pickle Crow Gold Project from First Mining, and as of 31 May 2021 has completed stage 1 Earn-in obligations under the agreement. AS the result of completing the Stage 1 Earn-in obligations, Auteco has a 51% equity interest in the Pickle Crow Gold Project. Stage 2 Earn-In: Auteco can earn a further 19% interest in the project by: Expending exploration expenditure in the 24-month period commencing on the date that Auteco satisfies the Stage 1 Earn-in of C\$5,000,000 ('Expenditure Payment 3'); and Within 90 days of completing expenditure Payment 3, making a cash payment to Seller in the amount of C\$1,000,000 ('Expenditure Payment 4'), (together the 'Stage 2 Earn In'). Also, Buy In: May buy a further 10% interest by paying C\$3,000,000 to First Mining; and a 2% Net Smelter Return granted after the Stage 2 Earn-In. Further details are included in ASX releases (17/02/2020, 13/03/20 and 18/3/21).</li> <li>For a more complete discussion of type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings relating to the Pickle Crow Project please refer to document 'Updated Mineral Resource Estimate for the Pickle Crow Property, Patricia Mining Division, Northwestern Ontario, Canada' NI-43-101 dated 15 June 2018 and available from System for Electronic Document Analysis and Retrieval (<a href="http://www.sedar.com">www.sedar.com</a>) for First Mining Inc.</li> </ul>

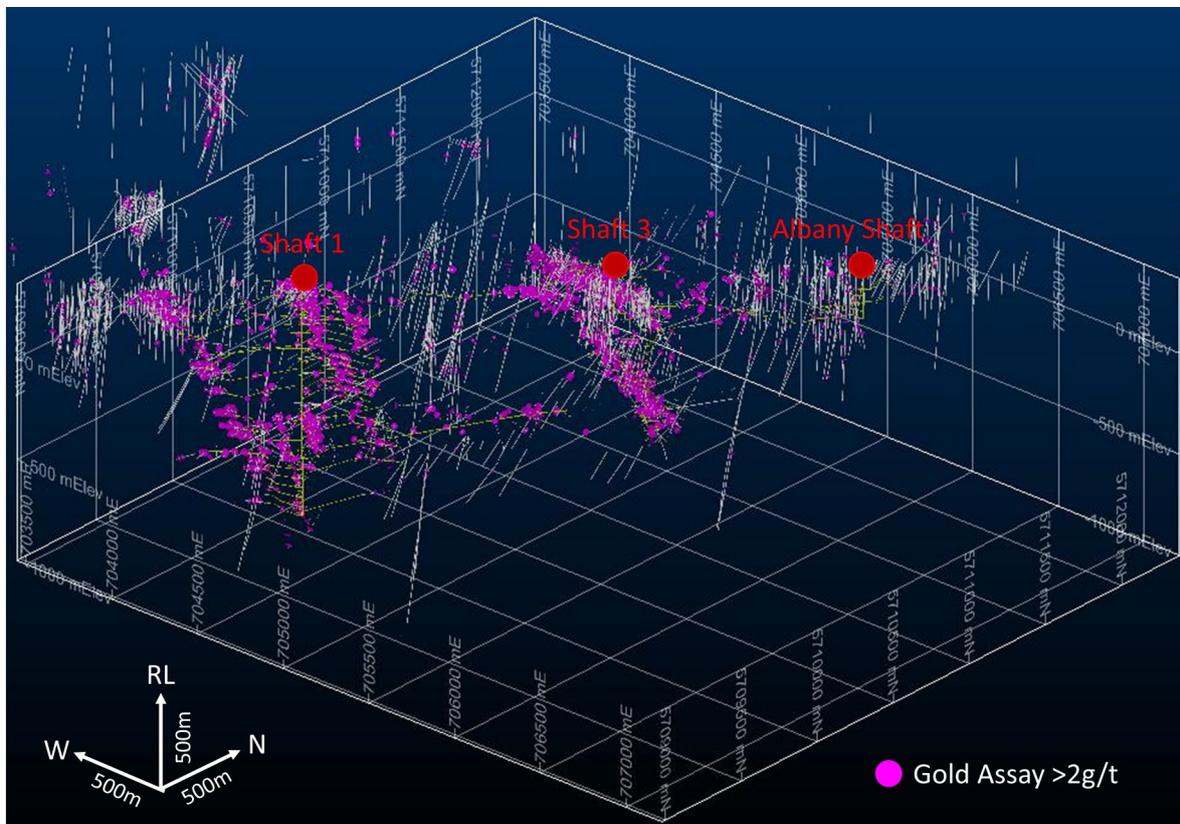
Criteria	JORC Code explanation	Commentary
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The first government survey of the area was performed by William McInnes of the Geological Survey of Canada (GSC) along the Crow River from 1903 to 1905. Prospecting in the Pickle Lake area commenced in 1926. In 1927, Lois Cohen of Haileybury formed a prospecting group and early that winter sent Alex and Murdock Mosher in to stake the first claims (December 1927) on what ultimately became the Central Patricia Gold Mines property. These claims were optioned by F.M Connell and Associates in August 1928 and Central Patricia Gold Mines Limited was incorporated on 19 February, 1929. Diamond drilling commenced at Central Patricia in February 1929 and production in March 1930. The Central Patricia discovery paved the way from exploration in the region which led to the discovery and initial drilling (1929) of the first Pickle Crow orebody the No.1 Vein by Northern Aerial Mineral Exploration Limited, a company set up in 1928 by J.E. (Jack) Hammell. In 1929 gold was also discovered by Albany River Miners Ltd. (Albany River) at the No.16 vein on the Albany River claims to the east of the then Pickle Crow property. Northern Aerial was acquired by Pickle Crow Gold Mines Limited (PCGM) in 1934 with Jack Hammell continuing as president. Production from the Pickle Crow mine began on 17 April, 1935. Albany river sank the Albany shaft to a depth of 190m between 1933 and 1938 and completed extensive underground development. Winoga Patricia Gold Mines was created in 1936 and drilled 73 surface diamond drill holes on a pie-shaped property located between PCGM's holdings and the Albany River Mines ground to the east. A mine shaft was subsequently sunk on the property in 1938. That same year, PCGM took over ownership of both Albany River Mines and Winoga Patricia Gold Mines through a new company called Albany River Gold Mines Ltd. It is believed that the Winoga Patricia Gold Mines shaft later became the No.3 Shaft of the Pickle Crow operation. The Cohen- MacArthur zone, located 2km to the north of the developing Pickle Crow mine, was discovered in 1933. A total of 14 surface diamond holes were drilled at Cohen-MacArthur in the winter of 1936. This property was optioned by PCGM in 1938, With the acquisition of the Cohen-MacArthur claims, PCGM became one of the largest land holders in the Pickle Lake area. The GSC completed a regional synthesis of the Pickle Crow Greenstone belt during this period as well. Ground and airborne geophysical surveys have been completed over all or parts of the Pickle Crow property at various times during its early history. A dip-needle survey completed in 1936 on the Pickle Crow property was useful in tracing out the bands of the iron formation. A detailed magnetic survey was carried out over the property by Teck (or its predecessor companies) around 1960. The property then underwent a series of ownerships until it became wholly owned by Teck in 1971. The property then sat dormant until 1973 when Pickle Crow Exploration Ltd. Reviewed the economics of reopening the mine. In 1978, a merger between Pickle Crow Explorations Ltd. And four other companies saw Teck's ownership reduced to 44.6% and a new exploration company called Highland-Crow Resources Ltd. Highland Crow went on to option the property to Galant Gold Mines Limited in 1979. Gallant performed a VLF_EM geophysical survey and drilled 47 surface diamond drill holes for 7,356m. The only known soil geochemical survey done on the Pickle Crow property was completed for Gallant in 1983. Soil values ranged from 10 to 12,000ppb with the high values attributed to mine tailings and cultural anomalies. In 1983 the property returned to</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>Highland-Crow. Noramco Mining Corp. bought Highland-Crow in 1988. Between 1985 and 1987 Highland-Crow completed line-cutting, magnetometer and IP, geophysical surveying, geological mapping, surface trenching, diamond drilling and environmental baseline studies. Noramco drilled surface exploration holes, completed geophysical surveys and commenced dewatering of the No.1 shaft. Noramco drilled 286 surface diamond drill holes for 46,189m and 79 underground holes for 9,341m. Noramco also commissioned Historic (non-compliant) Resource Estimates. In 1994 Noramco changed its name to Quest Capital. Quest assigned its interest to Pickle Crow Resources Inc. A total of 4 surface diamond drill holes for 2,287m were completed. Quest then sold its interest to Wolfden Resource Inc who entered into an option agreement with Jonpol Explorations Ltd. Who drilled 18 surface diamond holes for 2,173.5m. Wolfden also entered into a surface mining agreement with Cantera Mining Limited in 2000. Cantera commenced building a 225tpd gravity mill on site in 2002 but was placed into receivership in 2004. In 2006 Wolfden transferred Pickle Crow to Premier Gold Mines Ltd. Before the property was sold to PC Gold in 2007. PC Gold then explored the property completing 184 holes for 62,968m by 2011 and 173 holes for 35,840.4m from 2011 to 2014 before commissioning an NI-43-101 compliant Resource Estimate.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>• Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>• The Pickle Crow Gold Deposit is considered to be an Archean low-sulphide gold-quartz vein type deposit, also known as shear-hosted gold, Archean quartz-carbonate vein gold deposits, Archean lode gold, Archean mesothermal gold deposits or simply orogenic gold. The deposit occurs primarily within mafic volcanics and banded iron formation (BIF) units in the Pickle Crow assemblage of the Pickle Lake Greenstone belt in the Uchi Lake Sub province of the Superior Craton of the Canadian Shield.</li> </ul>
<b>Drill hole information</b>	<ul style="list-style-type: none"> <li>• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>○ easting and northing of the drill hole collar</li> <li>○ elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> <li>○ dip and azimuth of the hole</li> <li>○ down hole length and interception depth</li> <li>○ hole length.</li> </ul> </li> <li>• If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>• With regards to the drilling supporting the Resource, please refer to Appendix A in the ASX releases as indicated in this release.</li> <li>• With regards to new drilling and in accordance with ASX listing rule 5.7.2, please refer to Appendix A in this release. The new drilling has not been included in the current Resource estimate.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>• Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>• The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>• All drill hole intersections are reported above a lower cut-off grade of 0.5g/t Gold or 1g/t as indicated, with no upper cut off grade has been applied. A maximum of 1m internal waste was allowed. Tabulated results are presented in previous ASX announcements as indicated in the body of this release and in Appendix A of this release)</li> <li>• Metal equivalent values are not used</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• These relationships are particularly important in the reporting of Exploration Results.</li> <li>• If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>• If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>• All intersections reported in the body of this release are down hole</li> <li>• The majority of the drill holes are drilled as close to orthogonal to the plane of the mineralised lodes as possible. A number of drill holes have intersected the mineralisation at high angles.</li> <li>• Only down hole lengths are reported.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>• Maps and sections are included in the body of this release as deemed appropriate by the competent person.</li> <li>• See images below for 3D location of AUT and historic drillholes.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>• Any significant higher-grade zones in historical drilling quoted in this release have been reported in previous ASX announcements as highlighted in the body of this release as well as Appendix A of this release)</li> <li>• All results above 0.5g/t lower cut-off or 1g/t quoted in this release have been reported in previous ASX announcements as indicated in the body of this release as well as Appendix A of this release)</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>• Appropriate plans are included in the body of this release.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>• The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>• Auteco Minerals Limited is currently conducting drill testing of additional lodes as well as step out and infill drilling of existing lodes to further enhance the resources quoted in this release. More information is presented in the body of this report.</li> <li>• Diagrams in the main body of this release show areas of possible resource extension on existing lodes. The company continues to identify and assess multiple other target areas within the property boundary for additional resources.</li> </ul>



Isometric Image showing all drill holes completed by Auteco Minerals since March 2020. Gold assays greater than 2g/t are shown in pink. Historic underground development is shown in yellow.



Isometric Image showing all historical drill holes completed before Auteco Minerals became project managers in March 2020. Gold assays greater than 2g/t are shown in pink. Historic underground development is shown in yellow.

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>The CP for the Mineral Resource estimates (MRE) has not undertaken an independent data verification of the data supplied in the databases pertaining to this project. Data compilation and verification was undertaken by company employees and independent consultants to the company, and the Cube accepts that the work was diligently undertaken and does not represent a material risk to the project.</li> <li>The drilling data was supplied to Cube in a MS Excel format. This data has been relied upon as the source data for the June 2021 MRE work. Cube compiled the data for importing into a standard resource database in MS Access. Validation checks completed by the Cube included the following work:               <ul style="list-style-type: none"> <li>Maximum hole depths check between sample/logging tables and the collar records</li> <li>Checking for sample overlaps</li> <li>Reporting missing assay intervals</li> <li>3D visual validation in Surpac v6.9 of co-ordinates of collar drill holes to topography and UG workings drilling locations</li> <li>3D visual validation of downhole survey data to identify if any inconsistencies of drill hole traces.</li> </ul> </li> <li>No material issues were identified by Cube. No significant errors due to data corruption and transcription have been found.</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Brian Fitzpatrick (Principal Geologist at Cube Consulting) who is the Competent Person for the June 2021 MRE has not undertaken a site visit to date.</li> <li>Due to the worldwide travel restrictions currently in place because of the COVID-19 pandemic, it was not possible for the CP to propose undertaking a site visit prior to the completion of the June 2021 MRE. The CP has relied upon information provided by Auteco Geologists, and data room documentation provided by Auteco.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation domain interpretations and 3DMs were provided to Cube by Auteco for use in the June 2021 MRE.</li> <li>The confidence in the geological interpretation is high as a result of the current knowledge within the limits of the historical Pickle Crow UG workings (1935-1966) and diamond drilling from surface and UG drilling extending out from the workings. Interpreted extensions of mineralised quartz veins have been established through production history and available mapping and UG sampling records. This information has been used to guide and control the mineralisation interpretation and estimation factors. Mineralisation trends are open along strike and down plunge, so continuous review and understanding of lithological and structural controls are required to further increase the degree of precision and accuracy of the geological interpretation beyond the limits of the current information.</li> <li>The data used for the June 2021 MRE was comprised of surface and UG diamond drill holes and underground (UG) chip samples. Surface trench sampling results were not used in the June 2021 MRE. UG drilling and sampling locations have not been verified and UG chip sampling intervals were estimated over the true width of the mineralised quartz vein structures. Most of this data is in stope out areas and is not material to the depleted Resource Estimate.</li> <li>Previous interpretations have separated vein structures and domains into thin mineralised envelopes or interpreted variable thickness waste or dilution haloes around the in-situ mineralisation. Vein thicknesses were determined from the 3D wireframe interpretations and interpolating these thicknesses into the block model. Blocks with interpolated</li> </ul>

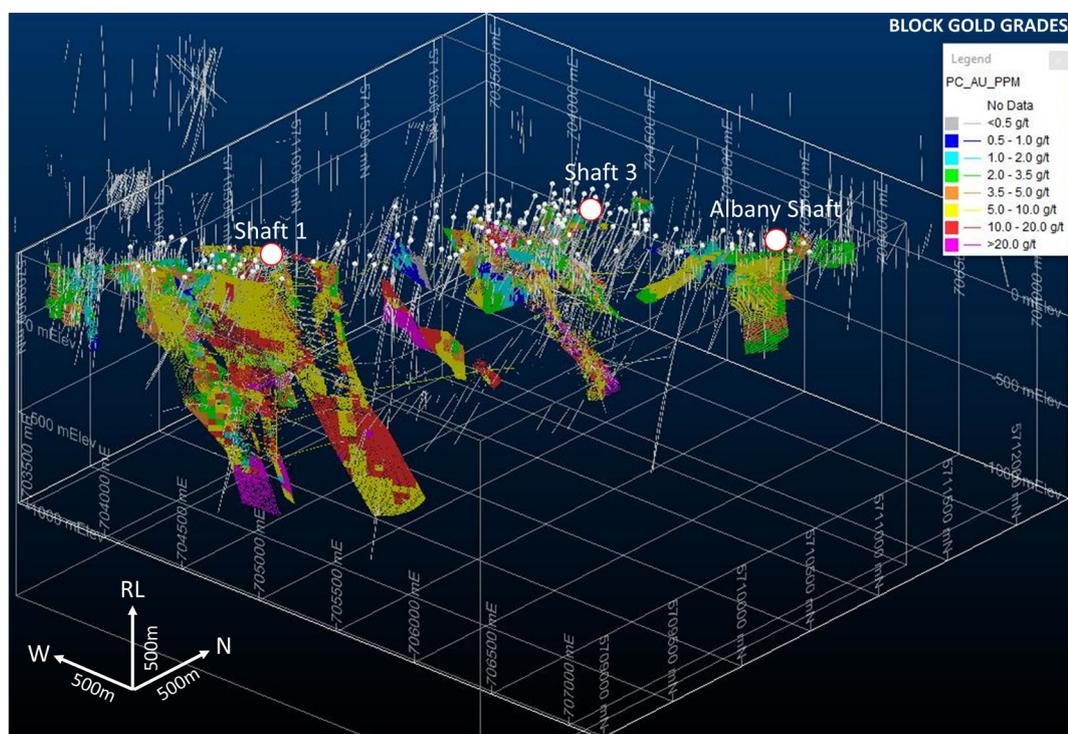
Criteria	JORC Code explanation	Commentary
		<p>thicknesses less than 1 m were then diluted to 1 m of thickness and reported above the cut-off grade as diluted tonnes and grade. The effect of this method resulted in the reporting of a diluted grade estimate taking into account a minimum mining width of 1 m.</p> <ul style="list-style-type: none"> <li>• The current geological interpretation is based on observations from logged diamond drill core, and the visual mapping in outcrop and underground of vein quartz, BIF hosted, and shear hosted zones within the host sequence. <ul style="list-style-type: none"> <li>○ The most prominent and continuous style of mineralisation is the auriferous quartz vein hosted mineralisation in several steeply dipping NE plunging zones – mined over the life of the Pickle Crow UG as the #1, 2, 5, 6, 7, 8 and 9 Veins.</li> <li>○ The second style of mineralisation at Pickle Crow is the gold-bearing BIF hosted type adjacent to the #1 and #5 vein mineralisation. Auriferous mineralisation comprises stringers and discontinuous lenses of quartz within sulphide replacement iron formation. Mineralisation is generally broader in thickness (3m-10m) but has been logged and mapped as both contorted and tight to isoclinal folded following the trend of the quartz vein hosted mineralisation.</li> <li>○ The shear zone-hosted type of mineralisation has been recorded in the Albany Shaft area. The mineralisation is described as broad, highly complex zones (both lithologically and structurally) of shearing with discontinuous quartz veining, and sulphidic BIF hosted zones.</li> <li>○ For the June 2021 MRE, interpretations for 16 domains were updated, and there were 11 new domains added to the Vein model inventory: four Quartz Vein hosted mineralisation zones, and 7 mineralisation domains interpreted in the Albany Shaft area.</li> </ul> </li> <li>• Grade distribution plots were created in Surpac to assist with assessing grade continuity along strike, down dip, and to assess if any down plunge component was apparent. Most major mineralised vein structures appear to plunge to the NE and currently open at depth. There are no definitive interpreted major fault structures and dyke intrusives modelled in 3D available for the June 2021 MRE. but available surface geology plans show several porphyry sill/dyke intrusives and minor NW fault structures. Tight to isoclinal folding within the Pickle Crow deposit area has been well recorded from fold structures clearly visible in the BIF units. Intrusives, fault structures and complex folding are likely to have influence over grade continuity at a local scale.</li> <li>• For the June 2021 MRE update, a glacial overburden surface was modelled across the resource area where geologically logged within the surface drill holes. The thickness of the overburden varies from 0m thick (where disturbed by old surface mining activities, to 20m thick within an apparent trough along the footwall of the main mineralisation trend. AS all of the overburden is waste material, there has been a minor depletion of previously stated mineralisation volumes.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>• The Mineral Resource area has overall dimensions of 3,800m strike (in a NE direction), 800m width and has been interpreted to extend to 1,800m below surface. Multiple lode systems exist within this area, predominantly within and in close proximity to the historical Shaft #1 and Shaft #3 workings.</li> </ul>
<b>Estimation and modelling techniques</b>	<ul style="list-style-type: none"> <li>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data</li> </ul>	<ul style="list-style-type: none"> <li>• The estimate has been produced by 3D modelling of the lode systems and block model grade estimation using a combination of 2D estimation modelling approach and 3D dynamic interpolation (DK), both using Ordinary Kriging (OK) or Inverse Distance to the power of 2 (ID2):</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p>points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</p> <ul style="list-style-type: none"> <li>• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource Estimate takes appropriate account of such data.</li> <li>• The assumptions made regarding recovery of by-products.</li> <li>• Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>• Any assumptions behind modelling of selective mining units.</li> <li>• Any assumptions about correlation between variables.</li> <li>• Description of how the geological interpretation was used to control the Resource Estimates.</li> <li>• Discussion of basis for using or not using grade cutting or capping.</li> <li>• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul style="list-style-type: none"> <li>○ The 2D estimation approach using OK was deemed appropriate for the very narrow, linear and continuous zones hosted by quartz veins. Interval composites were generated for the mineralised lode, which were then weighted by their respective widths to calculate an accumulation variable. The accumulation variable for gold was then used for variogram analysis and 2D interpolation of gold grades. The estimated 2D block values were then exported back into 3D space.</li> <li>○ Several quartz vein hosted domains show ribbon-like structures and although the overall dip and dip direction of most of the lodes are consistent, there are enough changes in geometry to require locally varying search ellipse and variogram directions. The dynamic anisotropy search feature in Surpac was used in which the search neighbourhood ellipse dip and dip direction are defined separately for each block approximating the orientation of each of the mineralised zones</li> <li>○ The influence of extreme grade values was reduced by grade capping where required. The grade capping levels were determined using a combination of grade capping analysis tools (grade histograms, log probability plots and CVs). Grade capping was reviewed and applied on a domain basis.</li> <li>○ The primary estimation domains are based on the geological wireframing of quartz veins and BIF hosted mineralisation within the Pickle Crow Shear Zone and additional quartz vein and shear zone domains.</li> <li>○ Drill hole sample data was flagged using domain codes generated from 3D mineralisation domains. Sample data was composited over the full downhole interval. There were consequently no residuals. Intervals with no assays were assigned background grades for the compositing routine as these un-assayed intervals in the drill holes were assumed to be waste.</li> <li>○ <i>Interpolation and Search Parameters</i> - For mineralised domains estimated using 2D OK method, variogram ranges and search distances were defined in a rotated horizontal plane. For the 3D DK method, variogram modelling was conducted to provide nugget, sill and range for 3 directions. Variogram maps were initially analysed in plan, east-west and north-south section to confirm continuity trends and to refine parameters for experimental variogram calculation. Interpolation parameters were set to a minimum number of 4 composites and a maximum number of 16 composites for the estimate. Maximum search ellipse of 200 metres was used.</li> <li>○ The maximum distance of extrapolation from data points was half the drill spacing.</li> <li>○ Computer software used for the modelling and block construction was Surpac v.6.9. Snowden Supervisor v.8.12 was used to prepare variogram and search parameters for specific domains.</li> <li>• Check Estimates/ previous estimates/mine production: <ul style="list-style-type: none"> <li>○ For the June 2021 MRE, ID2 estimation was used as a check estimate against the OK estimation, with no significant variations in global estimate results.</li> <li>○ A previous MRE was completed by Cube (August 2020) using the same methodology as reported for June 2021.</li> <li>○ A previous MRE was reported by Micon (2018) with an effective date of 31 August 2016, for First Mining Gold, the owner of the Pickle Crow Deposit at that time. The Resource Estimate was carried out using either OK method or inverse distance squared estimation (ID2) method (for estimation domains where data was limited), based on interpreted narrow high-grade zones. Overall, the lithological controls and</li> </ul> </li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>mineralisation trends were similar to the 2020 interpretation. The main differences included: the application of a minimum width of 1m applied to the domains for the 2016 model; 2D and DK estimation method applied for the 2021 model; Minor differences in grade estimation and search parameters. Previous work by other consultants in 2011 and 2016 involving data compilation and verification/validation of the historical UG drilling and sampling, along with the compilation of mapping, UG development and stope outlines, and early surface drilling provided support for the completion of the 2021 model and estimation work.</p> <ul style="list-style-type: none"> <li>○ Pickle Crow Gold Mines (PCGM) acquired the project in 1934 and commercial production at the mine began in 1935. The Pickle Crow mine operated until 1966 during which time it produced 1,446,214 troy ounces of gold and 168,757 troy ounces of silver from 3,070,475 tons of ore milled (at an average grade of 0.47 oz/ton or 16.14 g/t).</li> <li>● No by-product recoveries were considered</li> <li>● Estimation of deleterious elements was not completed for the MRE. There has been insufficient multi-element assaying completed in order to ascertain any effects of potential deleterious elements. Arsenic is known to be associated with some gold mineralisation but was not estimated for this model.</li> <li>● The parent block size used is 40mE, 5mN and 40m RL and sub-blocked to 2.5mEN x 0.625mN x 2.5mRL. The data spacing has relied on a combination of recent and historic surface diamond drilling, UG drilling and UG chip samples with no particular common sample spacing.</li> <li>● No assumptions of selective mining units were made.</li> <li>● No correlation analysis between gold and other elements has been assessed for the current model. Only gold and silver assays were provided for the June 2021 MRE.</li> <li>● The mineralised domains acted as a hard boundary to control the June 2021 MRE. The domain interpretations were based on historical UG mining knowledge of the steeply dipping quartz veining known to host gold mineralisation from drill logging and descriptions of mapping and sampling.</li> <li>● Gold grade distributions within the estimation domains were assessed to determine if high grade cuts or distance limiting should be applied on a domain by domain basis.</li> <li>● Block model validation was conducted by the following means: <ul style="list-style-type: none"> <li>○ Visual inspection of block model estimation in relation to raw drill data on a section by section basis.</li> <li>○ Volumetric comparison of the wireframe/solid volume to that of the block model volume for each domain.</li> <li>○ A global statistical comparison of input and block grades, and local composite grade (by northing and RL) relationship plots (swath plots), to the block model estimated grade for each domain.</li> <li>○ Comparison the cut grade drill hole composites with the block model grades for each lode domain in 3D.</li> <li>○ No selective UG mining records assigned to stopes or by Vein Number identification are currently available and therefore no reconciliation analysis has been conducted.</li> </ul> </li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>● Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>● The tonnages are estimated on a dry basis. Moisture was not considered in the density assignment.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>● The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>● The quartz vein style mineralised domains are reported at a 3.5g/t gold lower cut-off which is deemed acceptable based on approximate industry costings associated with the likely</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>mining method (narrow vein underground mining methods).</p> <ul style="list-style-type: none"> <li>The Banded Iron Formation style mineralised domains are reported at a 2.0g/t gold lower cut-off which is deemed acceptable based on approximate industry costings associated with the likely mining method (bulk underground mining methods or open pit mining).</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No rigorous application has been made of minimum mining width, internal or external dilution for interpreted mineralisation domains used for the June 2021 MRE.</li> <li>Underground (UG) mining has previously been assumed to be the main mining method based on historical mining activity at Pickle Crow. No assumptions on UG mining methods have been made.</li> <li>3DM modelling and block construction of a mineralised waste halo have been created with aim of preparing a suitable model for open pit mine design and pit optimisation, with a minimum mining width of 2m.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No metallurgical factors have been considered as part of the June 2021 MRE</li> <li>Metallurgical test work was completed by previous operators on the high-grade vein mineralisation at Pickle Crow and are summarised as follows: <ul style="list-style-type: none"> <li>Total gold extractions to a maximum exceeding 99% through a combination of gravity and 48-hour cyanide leach bottle rolls</li> <li>Gravity recoveries of up to 92.4% of total gold recovered by the Knelson Concentrator prior to cyanide leaching.</li> </ul> </li> <li>These results are in line with the historical performance of the Pickle Crow Gold mine which operated between 1935 and 1966 with recoveries averaging slightly over 98% recovered through a combination of gravity and cyanidation.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>No environmental factors have been considered as part of the June 2021 MRE. No assumptions have been made in regard to possible waste and process residue disposal options or the potential environmental impacts of the mining and processing operation. However, the project is the site of historic mining activity, located within an existing mineral field</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>Bulk density (BD) assignment was determined by laboratory BD sampling.</li> <li>PC Gold completed BD measurements on 2,602 samples of mineralised and unmineralised diamond drill core and select grab samples from old stockpiles onsite from the Pickle Crow property (Micon, 2018). The majority of the samples were measured by Accurassay of Thunder Bay, Ontario using the water displacement method. BD was assigned within the block model attribute 'density' according to rock types: Vein Quartz = 2.7; BIF Unit = 3.21; Waste Rock = 2.83.</li> <li>There were no considerations required for BD based on weathering profiles or porosity, as the mineralised quartz veins domains interpreted for this Resource Estimate lie entirely within the primary or fresh sulphide zone.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource has been entirely classified as Inferred. The Pickle Crow Deposit has been subject to mining since 1935 and historical workings demonstrate</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<p>grade and geological continuity. When assessing the combination of current drilling, historic drilling and underground chip samples used in the June 2021 MRE, no particular common sample grid exists. While data quality control is lacking for the majority of historic UG drilling and sampling used, a moderate amount of well controlled and industry standard recent drilling and re-sampling provides some validation of the information to support the estimation and classification of a Mineral Resource.</p> <ul style="list-style-type: none"> <li>The June 2021 MRE results appropriately reflects the Competent Person's view of the deposit.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource Estimates.</li> </ul>	<ul style="list-style-type: none"> <li>Internal peer review has been completed by Cube which verified the technical inputs, methodology, parameters and results of the estimate.</li> </ul>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource Estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>It is the CP's opinion that reported Inferred Resources are appropriate for the level of accuracy and confidence in the June 2021 MRE for Pickle Crow. This is in part based on the accuracy and precision of the assay determinations in the UG historical data which are unknown and only partially validated. There also exists potential errors in relation to the chip sample locations and the accuracy of the digitised UG workings and UG hole collar locations. In spite of these inaccuracies, the grade and tonnage discrepancies are minimal as much of these areas have not been stoped out, and the depleted material margin of error is within reasonable limits for Inferred Resource category.</li> <li>Modelling for the June 2021 MRE has provided an understanding of the global grade distribution but not the local grade distribution The Mineral Resources constitute a global Resource Estimate.</li> <li>Relative accuracy and confidence of the Inferred Resource Estimate is supported by a successful history of commercial production at the Pickle Crow Gold Mine which produced 1.5 Million oz @ 16g/t Gold between 1935 and 1966.</li> </ul>



Isometric image showing drill data density and distribution of the Inferred Mineral Resource block model. Blocks are coloured by gold grade. Grid spacing is 500m by 500m.