

#### **MEDIA RELEASE**

Austral Gold Limited 8 June 2017

# Austral Gold Announces Maiden Reserve Estimate for Amancaya Project and Updated Reserve and Resource Estimate at Guanaco Mine, Chile.

Austral Gold Limited ("Austral" or the "Company") (ASX: AGD; TSX-V: AGLD) is pleased to announce that Roscoe Postle Associates Inc. ("RPA") has completed a new independent resource and reserve estimate in accordance with the CIM Definitions 2014 in National Instrument ("NI") 43-101 and Joint Ore Reserves Committee Code, 2012 (JORC12) for the Company's 100% owned Amancaya project and Guanaco Mine, Chile. The Amancaya reserve estimate is the first in that project's existence.

#### **Highlights:**

#### Amancaya\*:

- Total Indicated resource at Amancaya of 804,690 tonnes at 9.64 g/t gold and 80.7 g/t silver for 277,352 Gold Equivalent ("AuEq") ounces, including:
  - A maiden probable reserve of 948,053 tonnes grading 6.77 g/t gold and 63.2 g/t silver for 232,074 AuEq ounces, including;
  - A maiden open pit probable reserve of 254,596 tonnes grading
     7.56 g/t gold and 119.5 g/t silver for 74,993 AuEq ounces
- Total Inferred resource at Amancaya of 959,554 tonnes at 6.79 g/t gold and 36.1 g/t Ag for 220,000 AuEq ounces.

#### Guanaco\*:

- Measured and Indicated resource of 2,193,000 tonnes grading 2.9 g/t gold and 13.0 g/t silver for 217,000 AuEq ounces, including;
- Total reserves of 489,635 tonnes grading 2.99 g/t gold and 3.6 g/t silver for 47,907 AuEq ounces, including;
  - Proven reserve of 189,613 tonnes grading 3.41 g/t gold and 4.1 g/t silver for 21,106 AuEq ounces, and,

- Probable reserve of 300,022 tonnes grading 2.73 g/t gold and 3.4 g/t silver for 26,801 AuEq ounces.
- Inferred resource: 1,200,000 tonnes grading 2.6 g/t gold and 12.9 g/t silver for 110,000 AuEq ounces.

"We are very pleased with this maiden reserve and resource estimate at Amancaya. It confirms the high grade nature of the Amancaya project and our expectation that Amancaya will play a significant part in our growth plans," stated Stabro Kasaneva, CEO of Austral Gold. "The Amancaya project is a unique asset; high grade gold and silver vein outcropping at surface that is fully permitted, pre-stripping has commenced and ore is being stock piled, pending the imminent commissioning of the new processing plant. The complete pre-feasibility study that evaluates the combined production from the Amancaya project with the operating Guanaco mine, including its new processing plant, is expected shortly. We are expecting that this study will reveal a financially robust combined operation located in a very attractive jurisdiction."

#### **Amancaya Reserve and Resource Estimate**

RPA undertook the study based on company infill drilling and exploration activities completed in 2016 and previous work done on the project by other companies. Full details and assumptions used will be available when the Technical Report summarizing the Pre-Feasibility study is filed on SEDAR and ASX within 45 days.

Table 15-1 Amancaya Ore Reserves – as at December 31, 2016
Austral Gold Ltd. – Guanaco and Amancaya Gold Project

|                       |              |         |       | Grades | 3     | Contai  | ned Metal O   | unces       |
|-----------------------|--------------|---------|-------|--------|-------|---------|---------------|-------------|
| Category              | Area         | Tonnage | Au    | Ag     | AuEq  | Au      | Ag            | AuEq        |
|                       |              | (t)     | (g/t) | (g/t)  | (g/t) | (oz)    | (oz)          | (oz)        |
| Undergroun            | Veta Central |         |       |        |       |         |               | 102,27      |
| <b>d</b> :Probable    | Norte        | 418,205 | 6.96  | 47.9   | 7.61  | 93,642  | 644,422       | 7           |
| Probable              | Veta Central |         |       |        |       |         |               |             |
|                       | Sur          | 275,253 | 5.74  | 34.2   | 6.19  | 50,754  | 302,259       | 54,804      |
| Total                 |              |         |       |        |       |         |               | 157,08      |
|                       | Underground  | 693,457 | 6.48  | 42.6   | 7.05  | 144,396 | 946,681       | 1           |
| Open Pit:<br>Probable | Open Pit     | 254,596 | 7.56  | 119.5  | 9.16  | 61,887  | 978,062       | 74,993      |
| Total                 | All          | 948,053 | 6.77  | 63.2   | 7.61  | 206,283 | 1,924,74<br>2 | 232,07<br>4 |

#### Notes:

- 1. Mineral Reserves followed CIM Definitions, 2014 and are compliant with the JORC Code, 2012.
- 2. Underground Mineral Reserves are estimated at a break-even cut-off grade of 2.5 g/t AuEq for stopes and an incremental cut-off grade of 1.5 g/t AuEq for drifts. Open Pit Mineral Reserves are estimated at a cut-off grade of 1.53 g/t AuEq.
- 3. Mineral Reserves are estimated using an average long-term gold price of US\$1,300 per ounce and silver price of

<sup>\*</sup>See tables below for assumptions used in the estimates.

#### US\$20 per ounce.

- 4. Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based on a Au and Ag price of \$1,300/oz and \$20/oz and recoveries of Au and Ag of 92% and 80%, respectively.
- 5. A minimum mining width of 1.5 m was used for stopes and 3.5 m for drifts.
- 6. Stope dilution: 0.5 m in the hanging wall and 0.5 m in the footwall (1.0 m total).
- 7. Drift dilution: 0.25 m in each of the side walls (0.5 m total).
- 8. Bulk density is 2.5 t/m3.
- 9. Numbers may not add due to rounding.

Table 14-1 Amancaya Mineral Resources –as at December 31, 2016
Austral Gold Ltd. – Guanaco and Amancaya Gold Project

|             | Category    | Tonnes |             | Grades      |               |             | Ounces      |               |
|-------------|-------------|--------|-------------|-------------|---------------|-------------|-------------|---------------|
|             |             | (kt)   | Au<br>(g/t) | Ag<br>(g/t) | AuEq<br>(g/t) | Au<br>(koz) | Ag<br>(koz) | AuEq<br>(koz) |
|             | Measured    | -      | -           | -           | -             | -           | -           | -             |
| Onen Bit    | Indicated   | 171.5  | 11.24       | 177.5       | 13.61         | 62.0        | 978.9       | 75.1          |
| Open Pit    | Total M + I | 171.5  | 11.24       | 177.5       | 13.61         | 62.0        | 978.9       | 75.1          |
|             | Inferred    | 60     | 7.6         | 110.0       | 9.0           | 15          | 210         | 20            |
|             | Measured    | -      | -           | -           | -             | -           | -           | -             |
| Underground | Indicated   | 633.2  | 9.21        | 54.50       | 9.94          | 187.4       | 1,109.5     | 202.3         |
| Underground | Total M + I | 633.2  | 9.21        | 54.50       | 9.94          | 187.4       | 1,109.5     | 202.3         |
|             | Inferred    | 900    | 6.7         | 31.0        | 7.2           | 195         | 910         | 210           |
|             | Measured    | -      | -           | -           | _             | _           | -           | _             |
|             | Indicated   | 804.7  | 9.64        | 80.7        | 10.72         | 249.4       | 2,088.4     | 277.4         |
| Total       | Total M + I | 804.7  | 9.64        | 80.7        | 10.72         | 249.4       | 2,088.4     | 277.4         |
|             | Inferred    | 960    | 6.8         | 36.0        | 7.3           | 210         | 1,110       | 220           |

#### Notes:

- 1. Mineral Resources followed CIM Definitions, 2014 and are compliant with the JORC Code, 2012.
- 2. Mineral Resources are reported inclusive of Mineral Reserves.
- 3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 4. Open pit Mineral Resources are reported at a cut-off grade of 1.5 g/t AuEq. Pit optimization shells were used to constrain the resources. Underground Mineral Resources are estimated at a cut-off grade of 2.5 g/t AuEq beneath the open pit shells.
- 5. Mineral Resources are estimated using a long-term gold price of US\$1,300 per ounce, and a silver price of US\$20 per ounce.
- 6. Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based on a gold and silver price of \$1,300/oz and \$20/oz and recoveries of gold and silver of 92% and 80%, respectively.
- 7. Minimum width for the open pit resource is 1.0 m and 1.5 m for the underground resource.
- Bulk density is 2.50 t/m<sup>3</sup>.
- 9. Numbers may not add due to rounding.

The very high conversion rate (approximately 86%) of the Indicated resource into reserves in the Amancaya maiden reserve estimate is a result of the consistent form and grade of the deposit.

#### **Guanaco Reserve and Resource Estimate**

#### Reserves:

Table 15-1 Guanaco Ore Reserves – as at December 31, 2016 Austral Gold Ltd. – Guanaco and Amancaya Gold Project

|                |                     |         |       | Grades | ì     | Contair | ned Metal | Ounces |
|----------------|---------------------|---------|-------|--------|-------|---------|-----------|--------|
| Category       | Area                | Tonnage | Au    | Ag     | AuEq  | Au      | Ag        | AuEq   |
|                |                     | (t)     | (g/t) | (g/t)  | (g/t) | (oz)    | (oz)      | (oz)   |
| Underground    |                     |         |       |        |       |         |           |        |
| Proven         | Cachinalito West    | 172,468 | 3.47  | 2.9    | 3.51  | 19,238  | 15,876    | 19,451 |
| Probable       | Cachinalito West    | 281,971 | 2.77  | 3.0    | 2.81  | 25,141  | 27,302    | 25,507 |
| Total          | Cachinalito<br>West | 454,439 | 3.04  | 3.0    | 3.08  | 44,379  | 43,178    | 44,958 |
| Proven         | Dumbo West          | 11,178  | 3.38  | 4.7    | 3.44  | 1,215   | 1,695     | 1,238  |
| Probable       | Dumbo West          | 14,256  | 2.29  | 7.5    | 2.39  | 1,049   | 3,446     | 1,095  |
| Total          | <b>Dumbo West</b>   | 25,434  | 2.77  | 6.3    | 2.85  | 2,264   | 5,141     | 2,333  |
| Proven         | Perseverencia       | 5,967   | 1.67  | 37.8   | 2.18  | 321     | 7,242     | 418    |
| Probable       | Perseverencia       | 3,795   | 1.43  | 14.4   | 1.63  | 175     | 1,755     | 198    |
| Total          | Perseverencia       | 9,762   | 1.58  | 28.7   | 1.96  | 496     | 8,998     | 616    |
|                |                     |         |       |        |       |         |           |        |
| Total Proven   | All                 | 189,613 | 3.41  | 4.1    | 3.46  | 20,774  | 24,813    | 21,106 |
| Total Probable | All                 | 300,022 | 2.73  | 3.4    | 2.78  | 26,365  | 32,503    | 26,801 |
| Total Reserves | All                 | 489,635 | 2.99  | 3.6    | 3.04  | 47,139  | 57,316    | 47,907 |

#### Notes:

- 1. Mineral Reserves followed CIM definitions, 2014 and are compliant with the JORC Code, 2012.
- 2. Mineral Reserves are estimated at a break-even cut-off grade of 2.0 g/t AuEq for stopes and an incremental cut-off grade of 1.0 g/t AuEq for drifts.
- 3. Mineral Reserves are estimated using an average long-term gold price of US\$1,300 per ounce and silver price of US\$20 per ounce.
- 4. Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based on a Au and Ag price of \$1,300/oz and \$20/oz and recoveries of Au and Ag of 92% and 80%, respectively.
- 5. A minimum mining width of 1.5 m was used for stopes and 3.5 m for drifts.
- 6. Stope dilution: 0.5 m in the hanging wall and 0.5 m in the footwall (1.0 m total).
- 7. Drift dilution: 0.25 m in each of the side walls (0.5 m total).
- 8. Bulk density is 2.5 t/m<sup>3</sup>.
- 9. Numbers may not add due to rounding.

#### Resources

Table 14-2 Guanaco Mineral Resources – as at December 31, 2016
Austral Gold Ltd. – Guanaco & Amancaya Gold Project

|                     | Tonnes | Grades   |          |            | Ounces   |          |               |  |
|---------------------|--------|----------|----------|------------|----------|----------|---------------|--|
| Deposit             | (kt)   | Au (g/t) | Ag (g/t) | AuEq (g/t) | Au (koz) | Ag (koz) | AuEq<br>(koz) |  |
| Measured            |        |          |          |            |          |          |               |  |
| Cachinalito Central | 111.4  | 4.37     | 3.5      | 4.42       | 15.6     | 12.4     | 15.8          |  |
| Cachinalito West    | 164.0  | 3.03     | 3.5      | 3.08       | 16.0     | 18.3     | 16.2          |  |

| Defensa             | 81.9  | 2.52 | 25.7 | 2.86 | 6.63 | 67.5 | 7.54 |
|---------------------|-------|------|------|------|------|------|------|
| Dumbo West          | 102.9 | 3.43 | 9.6  | 3.56 | 11.3 | 31.9 | 11.8 |
| Perseverancia       | 180.8 | 2.17 | 23.4 | 2.48 | 12.6 | 136  | 14.5 |
| Natalia             | -     | -    | -    |      | -    | -    | -    |
| Total Measured      | 641   | 3.02 | 12.9 | 3.19 | 62.2 | 266  | 65.8 |
| Indicated           |       |      |      |      |      |      |      |
| Cachinalito Central | 235.3 | 3.98 | 3.9  | 4.03 | 30.1 | 29.4 | 30.5 |
| Cachinalito West    | 350.0 | 2.91 | 3.6  | 2.95 | 32.7 | 41.0 | 33.2 |
| Defensa             | 303.0 | 2.56 | 22.3 | 2.86 | 25.0 | 217  | 27.9 |
| Dumbo West          | 320.8 | 3.13 | 10.6 | 3.28 | 32.3 | 110  | 33.8 |
| Perseverancia       | -     | -    | -    |      | -    | -    | -    |
| Natalia             | 342.5 | 2.03 | 23.0 | 2.34 | 22.4 | 253  | 25.8 |
| Total Indicated     | 1,552 | 2.86 | 13.0 | 3.03 | 143  | 650  | 151  |
| Inferred            |       |      |      |      |      |      |      |
| Cachinalito Central | 197   | 3.9  | 4.7  | 3.9  | 24   | 29   | 25   |
| Cachinalito West    | 94    | 2.7  | 4.0  | 2.7  | 8    | 12   | 8    |
| Defensa             | 31    | 2.4  | 22.0 | 2.7  | 2    | 21   | 3    |
| Dumbo West          | 693   | 2.4  | 17.0 | 2.7  | 54   | 369  | 59   |
| Perseverancia       | 134   | 2.1  | 10.0 | 2.2  | 9    | 45   | 10   |
| Natalia             | 45    | 2.2  | 12.0 | 2.4  | 3    | 17   | 3    |
| Total Inferred      | 1,200 | 2.6  | 12.9 | 2.8  | 100  | 500  | 110  |
| Underground         |       |      |      |      |      |      |      |
| Measured            | 641   | 3.02 | 12.9 | 3.19 | 62   | 266  | 65.8 |
| Indicated           | 1,552 | 2.86 | 13.0 | 3.03 | 143  | 650  | 151  |
| Total M + I         | 2,193 | 2.90 | 13.0 | 3.08 | 205  | 916  | 217  |
| Inferred            | 1,200 | 2.6  | 12.9 | 2.8  | 100  | 500  | 110  |

#### Notes:

- 1. Mineral Resources followed CIM definitions, 2014 and are compliant with the JORC Code, 2012.
- 2. Mineral Resources are reported exclusive of Mineral Reserves and do not include dilution
- 3. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 4. Mineral Resources are reported at a 1.5 g/t AuEq cut-off grade where AuEq = Au + (0.0134 \* Ag).
- 5. Mineral Resources are estimated using a long-term gold price of US\$1,300 per ounce, and a silver price of US\$20 per ounce.
- 6. Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based on a Au and Ag price of \$1,300/oz and \$20/oz and recoveries of Au and Ag of 92% and 80%, respectively.
- 7. A minimum mining width of 1.5 m was not used for the estimation of the Mineral Resource.
- 8. Bulk density is 2.50 t/m<sup>3</sup>.
- 9. Numbers may not add due to rounding.

There are no known legal, political, environmental, or other risks that could materially affect the potential development of the mineral resources or mineral reserves.

#### **COMPETENT PERSONS**

The Amancaya and Guanaco Reserve and Resource Estimates were prepared in accordance with CIM Definitions, 2014 in NI 43-101 and JORC Code 2012 and will be filed

under the Company's profile on SEDAR and ASX within 45 days of this press release. The RPA Competent Persons (CPs) for the Amancaya and Guanaco Reserve and Resource Estimate include:

- Jason J. Cox, P.Eng. (Mineral Reserves)
- Ian Weir, P.Eng. (Mineral Reserves)
- Chester M. Moore, P.Eng., (Mineral Resources)

This press release has been reviewed and approved by the RPA Competent Persons.

#### About Austral Gold

Austral Gold Limited is a growing precious metals mining, development and exploration company building a portfolio of quality assets in Chile and Argentina. The Company's flagship Guanaco project in Chile is a low-cost gold and silver producing mine with further exploration upside. The Company is also operator of the underground silver-gold Casposo mine in San Juan, Argentina, where it has 70% ownership. With an experienced local technical team and highly regarded major shareholder, Austral's goal is to continue to strengthen its asset base through acquisition and discovery. Austral Gold Limited is listed on the TSX Venture Exchange (TSX-V:AGLD), and the Australian Securities Exchange (ASX: AGD). For more information, please consult the company's website www.australgold.com

Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.

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#### **Forward Looking Statements**

Statements in this news release that are not historical facts are forward-looking statements. Forward-looking statements are statements that are not historical, and consist primarily of projections - statements regarding future plans, expectations and developments. Words such as "expects", "intends", "plans", "may", "could", "potential", "should", "anticipates", "likely", "believes" and words of similar import tend to identify forward-looking statements. Forward-looking statements in this news release include the Company's expectation that the project will play a significant part in its growth plans, its expectation the commissioning of its new processing is imminent, its expectation that the complete pre-feasibility study the combined production at Amancaya and Guanaco is expected shortly, as well as its expectation of what that study will reveal. All of these forward-looking statements are subject to a variety of known and unknown risks, uncertainties and other factors that could cause actual events or results to differ from those expressed or implied, including, without limitation, business integration risks; uncertainty of production, development plans and cost estimates, commodity price fluctuations; political or economic instability and regulatory changes; currency fluctuations, the state of the capital markets, uncertainty in the measurement of mineral reserves and resource estimates, Austral's ability to attract and retain qualified personnel and management, potential labour unrest, reclamation and closure requirements for mineral properties; unpredictable risks and hazards related to the development and operation of a mine or mineral property that are beyond the Company's control. the availability of capital to fund all of the Company's projects and other risks and uncertainties identified under the heading "Risk Factors" in the Company's continuous disclosure documents filed on SEDAR. You are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Austral cannot assure you that actual events, performance or results will be consistent with these forward-looking statements, and management's assumptions may prove to be incorrect. Austral's forward-looking statements reflect current expectations regarding future events and operating performance and speak only as of the date hereof and Austral does not assume any obligation to update forward-looking statements if circumstances or management's beliefs, expectations or opinions should change other than as required by applicable law. For the reasons set forth above, you should not place undue reliance on forward-looking statements.



## **JORC CODE (2012) TABLE 1**

The following table provides a summary of important assessment and reporting criteria used at the Guanaco and Amancaya Gold Project for the reporting of Mineral Resources in accordance with the Table 1 checklist in The Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code, 2012 Edition). Criteria in each section apply to all preceding and succeeding sections.

Reference is made to Competent Persons from Roscoe Postle Associates Inc. (RPA), namely:

- Jason Cox, P.Eng. (covering Sections 15, 16, 18, 21, and 22 and contributed to Sections 1, 25, and 26 of the Technical Report with my co-author, Ian Weir).
- Chester Moore, P.Eng. (covering Sections 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 14, and 23 and contributed to Sections 1, 25, and 26).
- Ian Weir, P.Eng. (covering Sections 15, 16, 18, 19, 21, and 22 and contributed to Sections 1, 25, and 26 of the Technical Report with my co-author, Jason Cox).
- Dr. Kathleen Altman P.E., Ph.D. (covering Sections 13, 17, and 20 of the Technical Report and contributed to Sections 1, 25, and 26).

The Competent Persons prepared a NI 43-101 Technical Report on the property, dated May 31, 2017.

#### SECTION 1 – SAMPLING TECHNIQUES AND DATA

| Criteria   | Commentary   |  |  |  |  |  |  |
|------------|--|--|--|--|--|--|--|
| Sampling   | Guanaco  |  |  |  |  |  |  |
| Techniques | <ul> <li>From project inception, staff employed by the respective project owners were<br/>responsible for sample collection, core splitting, density determinations, sample<br/>storage, and sample security.</li> </ul>   |  |  |  |  |  |  |
|            | <ul> <li>Every underground face advance (3.5 m average) is channel-sampled. The<br/>channel-sample length ranges from 0.4 m to 1.0 m in mineralized portions. No<br/>fixed lengths have been established for samples in barren zones. The intervals<br/>between marks are sampled by chipping the walls with a chisel and a hammer<br/>on a 20 cm to 30 cm width. The sample weight is 5 kg to 8 kg on average.</li> </ul> |  |  |  |  |  |  |
|            | Previous owners (1980 to 2000) collected RC samples at 1 m, 1.5 m, and 2.0 m   |  |  |  |  |  |  |



intervals.

- GCM RC samples were collected every 1.5 m in 2004, and every one metre or two metres in the 2006–2015 drilling campaigns. A riffle splitter was installed just below the cyclone to divide the whole sample. The sample was split and collected in two metallic trays. One portion was selected for analysis and the second was retained for back up. A small portion of the sample was collected by a spoon and placed in a chip sample tray for geological logging. Samples were weighed and bagged into pre-labelled plastic bags. The average estimated sample weights were 52 kg and 26 kg for 2 m and 1 m samples respectively.
- GCM diamond-drill sampling during the 2015 campaign consisted of splitting the core in half using a manual splitter, and following a line marked by the logging geologists.

- Recent Amancaya sampling was completed in three main phases:
  - Yamana Gold Inc. (Yamana) trenching and reverse circulation (RC) drilling – 2004 to 2008
  - Grupo Minero Las Cenizas S.A. (Cenizas) resampling of trenches and drilling – 2009.
  - 3. Austral Gold Ltd. (Austral) diamond drilling 2015 and 2016.
- Yamana trench samples were collected by channel sampling of freshly exposed bedrock in surface trenches. The channel samples were a standard one metre in length, however, they were occasionally shorter depending on geological boundaries. Standards, blanks, and duplicate chip samples were inserted into the sample stream.
- For Yamana and Cenizas RC drilling, two chip samples were collected using a cyclone, one to be sent for analysis and one to be saved as a reject sample. Sample intervals were generally two metres, but occasionally one metre, and the size of collected sample ranged from eight kilograms to ten kilograms. A sample number was assigned to each sampled interval. Quality Assurance (QA) and Quality Control (QC) samples were inserted into the sampling stream for each vein intersection. Sample intervals were determined by both lithology and a visual estimate of quartz veining and quartz stockworks/breccia. Sampling of mineralized zones was generally on one metre intervals, however, mineralized contacts were also considered.
- For Cenizas diamond drilling, half core samples over two metres were taken where mineralization or alteration was visible, respecting lithological contacts identified in the diamond drill core. Core was split using a hydraulic splitter. Minimum sample length within the mineralized veins was 0.20 m. Unaltered and unmineralized half core samples were taken at three metre intervals, with some compositing of samples up to nine metres performed after sample preparation. QA and QC samples were inserted into the sampling stream for each vein intersection.
- For Austral half core samples over 1.5 m were taken where mineralization or alteration was visible, respecting lithological contacts identified in the diamond drill core. Core was split using a hydraulic splitter. Minimum sample length within the mineralization veins was 0.30 m. Unaltered and unmineralized half core samples were also taken at 1.5 m intervals. Quality Assurance (QA) and Quality Control (QC) samples were inserted into the sampling stream for each



#### Commentary

vein intersection. Drill core was collected at the drill site by a company truck.

Sample collection is described in CPR Section 11.

#### Drilling Techniques

#### Guanaco

- A total of 304,218 m in 2,110 RC, core and mixed holes (RC and core) have been drilled on the Project from 1980 to March 30, 2015. Of these drill holes, the majority are RC (2,062 holes, totalling 293,025 m).
- There is no information regarding the type of rig used, hole diameters, and sample collection techniques used in holes drilled before 1991.
- Amax drilled 1,005 holes totalling 142,674 m between 1991 and 1997. These holes were drilled using reverse circulation rotary drills and comprised exploration, condemnation and infill drill holes. The first 175 rotary holes were drilled with 5¼ inch bits, except for the top three metres to six metres of each hole, which was drilled with seven inch bits to allow installation of the casing. The majority of drilling was accomplished using conventional pneumatic hammers, but 15% to 20% of the meterage was drilled with tricone bits. About 1% to 2% of the drill holes were drilled with an open-face hammer bit.
- Kinam drilling programs (1999-2000) consisted of 138 RC drill holes totalling 25,645 m. In addition, three diamond holes were completed during the Kinam exploration program totalling 572.65 m. An additional 34 RC drill holes were drilled during 2000, totalling 7,597 m. Tricones with 5½" or 5¾" diameter were used so that each sample would weigh approximately 58 kg to 64 kg.

#### **Amancaya**

- Amancaya drilling was completed in three main phases:
  - 1. Yamana 2004 to 2008.
  - 2. Cenizas 2009.
  - 3. Austral 2015 and 2016.
- Yamana completed 54,782 m of 201 RC holes.
- Cenizas completed 2,924 m of RC/core drilling in 20 drill holes and 2,130 m of core drilling in five holes. All target depths were drilled using diamond drills with HQ diameter core, however, 20 holes were pre-collared using RC drills.
- Austral Gold completed seven oriented HQ3 (61.1 mm core diameter) diamond drill holes for geotechnical purposes during 2015 and 93 infill drill holes in 2016 for a total of 12,207 m. The 2016 drilling was targeted on approximately 30 m centres and consisted of reverse circulation drilling for the collars and upper part of the hole and HQ core drilling through the mineralized portion of the holes. Drill collars were positioned using a differential GPS unit and downhole gyro surveys were completed in all holes. Final drill collar positions were surveyed using a total station instrument.
- Drilling techniques are described in CPR Section 10.

## Drill Sample Recovery

- Recoveries for the 2012 to 2015 campaigns were recorded as 95%–100% for diamond drilling and 80% to 100% for RC drilling. In some areas of structural complexity, the recovery average for core drilling could be about 80%.
- In RPA's opinion, the splitting of the core and its replacement in the core boxes



#### Commentary

have been done to industry standards.

 No significant correlation of grade bias attributed to lower sample recovery was noted.

#### **Amancaya**

- Core recovery is generally very good and would not impact sample integrity.
   Core recoveries were calculated prior to logging.
- RPA examined mineralized core from twenty-four Austral drill holes and nine Cenizas drill holes. In RPA's opinion, the splitting of the core and its replacement in the core boxes have been done to industry standards.
- RPA noted no significant correlation of grade bias attributed to lower sample recovery.

#### Logging

#### Guanaco

- Standardized logging forms and geological legends were developed by GCM for the deposits based on the mining operations and drilling completed. The geological legend is partly built on historical observations of the local geology.
- Geological logging was performed digitally for all GCM programs. Data recorded lithology, structures (faults, fracturing, fault angle respect core axis), alteration (advanced argillic, argillic, siliceous, vuggy silica, propylitic, and fresh rock), ore minerals (oxide iron, oxide copper, sulphur, pyrite, and mineralization style). Mineral zones are not explicitly included but are generally marked by the loggers.
- Logging was generally quantitative in nature with the exception of structural and geotechnical measurements and the estimation of recoveries.
- RPA is of the opinion that the core handling, logging, splitting, and sampling procedures are of sufficient quality to support Mineral Resource and Ore Reserve estimates.

#### **Amancava**

- Diamond drill core was geologically logged using predefined logging codes for lithological, mineralogical, and physical characteristics.
- Logging was generally quantitative in nature with the exception of structural and geotechnical measurements and the estimation of recoveries.
- Drill core was photographed and digitally stored for visual reference.
- RPA is of the opinion that the core handling, logging, splitting, and sampling procedures are of sufficient quality to support Mineral Resource and Ore Reserve estimates.

#### Sub-Sampling Techniques and Sample Preparation

- RC samples were collected every 1.5 m in 2004, and every one metre or two metres in the 2006–2015 drilling campaigns.
- A riffle splitter was installed just below the dust collector opening (cyclone) to divide the whole sample. The sample was split and collected in two metallic trays. One portion was selected for analysis and the second was retained for back up. A small portion of the sample was collected by a spoon and placed in a chip sample tray for geological logging.
- Samples were weighed and bagged into pre-labelled plastic bags. The average



estimated sample weights were 52 kg and 26 kg for two metres and one metre samples respectively.

- Diamond-drill sampling during the 2015 campaign consisted of splitting the core in half using a manual splitter, and following a line marked by the logging geologists.
- The sample preparation techniques were appropriate for the sample type.
   Preparation techniques vary but usually comprised oven drying, crushing, and pulverizing samples to established parameters:
- During the 2009–2013 GCM drill programs, sample preparation at Acme was as follows:
  - Weighing
  - Drying at 105°C on stainless steel trays;
  - Crushing to 85% minus 2 mm with a jaw crusher with a 10 mesh vibrating screen
  - o Homogenization and splitting to obtain 3 sub-samples of 1 kg each one.
  - Pulverizing of the collected sub-sample to 85% minus 0.106 mm in an LM-2 pulveriser.
  - Homogenization and splitting to obtain about a 250 g sub-sample
- Gold was assayed by FA and AAS finish in 25 g aliquots. The lower detection limit was 0.005 g/t.
- During the 2014–2015 drilling programs, sample preparation at Geoanalítica was as follows:
  - Drying at 105°C on stainless steel trays
  - Crushing to 85% minus two millimetres with a jaw crusher with a ten mesh vibrating screen
  - o Homogenization and splitting to obtain about a 1,000 g sub-sample
  - Pulverizing of the collected sub-sample to 95% minus 0.105 mm in an LM-2 pulveriser
- Gold was assayed by FA and AAS finish in 50 g aliquots. The detection limit
  was 0.01 g/t. For Au grades greater than 3 g/t the assays were finished by
  gravimetric method.
- Samples were also assayed for Cu and Ag by AAS with aqua regia digestion.
   For Ag grades greater than 50 ppm the assays were finished by gravimetry.
   The detection limits were 0.001% Cu and 1.0 g/t Ag.

- Drilling included assaying of half core for diamond drill holes and chip samples for RC holes:
- For diamond drill holes, sample intervals were marked and the core was split with a mechanical splitter. One half of the core was placed in plastic bags and tagged with a unique sample number. The other half of the core was returned to the core box and securely stored. For RC drilling, two chip samples were collected with a cyclone. During the sampling processes, as per the QA/QC protocols, blanks and standards were submitted into the sample stream at regular intervals.
- The sample preparation techniques were appropriate for the sample type.
   Preparation techniques vary but usually comprised oven drying, crushing, and pulverizing samples to established parameters:



- Yamana used ALS Chemex (ISO 9001 accreditation) in La Serena, Chile as the primary laboratory, and Acme Analytical Laboratories in Santiago, Chile (Acme, ISO 9001: 2000 and ISO/IEC 17025: 2005) as the secondary laboratory. The preparation protocol at the ALS Chemex preparation facility consisted of:
  - Drying
  - o Crushing to 85% passing 10 mesh
  - Splitting and pulverization of 1,000 g to 85% passing 200 mesh (74 μm)
  - Separation of three bags of pulp with approximately 250 g each
- Cenizas used Acme as the primary laboratory. The preparation protocol at the Acme preparation facility consisted of:
  - Drying
  - o Crushing to 70% passing 10 mesh
  - Splitting and pulverization of 500 g to 100% passing 200 mesh (74 μm)
  - Separation of a 50 g split of the pulp material
- The Guanaco Mine laboratory was used by Austral in 2015. The preparation protocol at the mine preparation facility consisted of:
  - Drying
  - Crushing to better than 85% passing 10 mesh
  - Splitting and pulverization of one kilogram of sample to 95% passing 200 mesh (74 μm)
  - Separation of a 30g split of the pulp material
  - In 2016, samples were prepared by Activation Laboratories Limited (Actlabs) in Santiago, Chile, which holds accreditation for laboratory competence (ISO/IEC 17025). The preparation protocol at the mine preparation facility consisted of:
    - Weighing followed by drying at 105°C
    - Crushing to pass 85% through a 10 mesh screen.
    - Homogenization of the crushed material and pulverization of a 50 g split to 95% passing through a 150 mesh screen to be taken for chemical analysis.
- Some samples were prepared by ALS Global (ALS) in Antofagasta, Chile, which holds accreditation with for laboratory competence (ISO/IEC 17025).
  - Weighing followed by drying at 120°C
  - o Crushing to pass 70% through a 10 mesh screen.
  - Homogenization of the crushed material and pulverization of a 1,000 g split to 85% passing through a 200 mesh screen to be taken for chemical analysis.
- The assay sample sizes are considered appropriate for the style of mineralization.
- Sampling techniques are described in CPR Section 10 and sample preparation techniques are described in CPR Section 11.

#### Quality of Assay Data and Laboratory Tests

- During the 2009–2013 GCM drill programs, sample analysis at Acme was as follows:
  - Gold was assayed by FA and AAS finish in 25 g aliquots. The lower detection limit was 0.005 g/t.
- During the 2014–2015 drilling programs, sample preparation at Geoanalítica was as follows:
  - o Gold was assayed by FA and AAS finish in 50 g aliquots. The detection



- limit was 0.01 g/t. For Au grades greater than 3 g/t the assays were finished by gravimetric method.
- Samples were also assayed for Cu and Ag by AAS with aqua regia digestion. For Ag grades greater than 50 ppm the assays were finished by gravimetry. The detection limits were 0.001% Cu and 1.0 g/t Ag.
- Core and channel samples were assayed at the mine laboratory. Gold was assayed by FA and AAS finish in 30 g aliquots. The detection limit was 0.01 g/t. For Au grades greater than 6.66 g/t, the assays were finished by gravimetric method. Ag and Cu were assayed using AAS with aqua regia digestion. The detection limits were 1 g/t Ag and 0.001% Cu.
- Assay batches at the mine laboratory consist of 28 ordinary samples, plus one coarse duplicate, one pulp duplicate, one coarse blank (quartz) and two reference materials (with low and high gold grades) obtained from commercial producers. In addition, 20 samples are submitted to Geoanalítica every month for external checks.
- There have been a number of QA/QC programs to verify analytical results.
   These include sets of certified reference materials (CRMs) and pulp duplicates submitted as part of the original sampling and a series of pulps submitted for reassaying.
   QA/QC results indicate:
  - GCM's QA/QC program comprised insertion of field duplicates, check samples, coarse blanks, and SRMs. The control samples for the 2004 drill program were inserted in the submission batches on site prior to submission to ALS Chemex.
  - o GCM also submitted check samples (pulverised samples) to Actlabs at La Serena, (2.8% of the routine samples). GCM personnel inserted the control samples (field duplicates and coarse blanks) in the submission batches on site for the 2006–2007 drill programs, prior to submission to Geoanalitica. GCM also submitted check samples (pulverised samples) to Actlabs in La Serena during 2006 (at a rate of about 6.77% of the routine samples). The 2007 check samples (pulverised samples) were submitted to Actlabs in La Serena, in a proportion of about 2.1% of the routine samples.
- In the 2008–2011 campaign GCM inserted 122 coarse duplicates and 293 coarse blanks in the submitted batches prior to submission to Vigalabs and Acme Laboratories.
- In 2012, during the deep-drilling project, ten field duplicates and 14 coarse blanks of a total population of 895 samples were inserted prior submission to Acme, for an approximate insertion rate of 2.7%. For the RC exploration campaign 23 field duplicates and 27 coarse blanks of a total population of 1,965 samples were inserted prior submission to Acme.
- During 2013 campaign, GCM inserted 61 field duplicates and 53 coarse blanks of a total population of 4,607 samples prior to submission to Acme.
- During the 2014–2015 campaign, the geological QC program consisted of the insertion of coarse blanks and field duplicates (1.2% and 1.6%, respectively, of the total number of RC samples). No SRMs were inserted in the Geoanalitica submission batches. The core-sample batches submitted to the mine laboratory only included the insertion of one single SRM (3.5% of the samples submitted to the mine laboratory). No QC protocol is in place for channel sampling.

#### **Amancaya**

The Yamana samples submitted to ALS Chemex were assayed as follows:



- Gold by fire assay (FA) with either an atomic absorption spectroscopy (AAS) finish or a gravimetric finish for samples assaying greater than 5 g/t Au.
- Silver using aqua regia digestion and AAS finish; in samples above 50 g/t Ag, by four acid digestion and AAS finish.
- Samples were also sent for multi-element geochemistry using a standard inductively coupled plasma mass spectrometry (ICP-MS) package to determine concentration of elements including arsenic, antimony, copper, lead, manganese, molybdenum, and zinc.
- Cenizas samples submitted to Acme were assayed for gold and silver using agua regia digestion with AAS finish:
  - Gold by FA and either a gravimetric or AAS finish, using method Au4-50 or Au4A-50 for samples with Au greater than 10 g/t.
- Samples assaying greater than 10 g/t Au or 100 g/t Ag were rerun using a gravimetric finish.
- Samples were also sent for multi-element geochemistry using a standard ICP-MS package to determine concentration of 32 elements for element association analysis.
- Austral used standard FA methods using a 30 g pulp sample to determine total gold and silver content. All samples are analyzed for gold using FA with AAS finish, and for silver using aqua regia digestion and AAS.
- Actlabs standard fire assay methods used a 30 g pulp sample to determine total gold and silver content. All samples are analyzed for gold using fire assay (FA) with Atomic Absorption Spectroscopy (AAS) finish, and for silver using aqua regia digestion and AAS finish. Samples assaying greater than 5 g/t Au were rerun using FA with a gravimetric finish. Samples for which the preliminary assay is greater than 50 g/t Ag were rerun using a four-acid digestion and AAS finish. Samples for which the secondary assay is greater than 1,000 g/t Ag were rerun a second time using FA with a gravimetric finish
- ALS standard fire assay methods used a 30 g pulp sample to determine total gold and silver content. All samples were analyzed for gold using FA with AAS finish, and for silver using aqua regia digestion and AAS finish. Samples assaying greater than 10 g/t Au were rerun using FA with a gravimetric finish. Samples for which the preliminary assay is greater than 100 g/t Ag were rerun using a longer aqua regia digestion and AAS finish.
- There have been a number of QA/QC programs to verify analytical results.
   These include sets of certified reference materials (CRMs) and pulp duplicates submitted as part of the original sampling and a series of pulps submitted for reassaying. QA/QC results indicate:
  - The QA/QC program implemented by Yamana from 2003 to 2008 included the insertion of control samples to monitor assay accuracy (standards) and contamination (blanks).
  - Most details of the QA/QC protocol implemented by Cenizas during its 2009 drill program were not available. However, selected protocols and results of duplicate and blank samples included during this program were reviewed.
  - A total of 17 samples, sourced from four distinct gold CRMs, and one silver and copper CRM, were submitted for analysis alongside 83 samples submitted during the 2015 Austral drill samples, for an insertion rate of 20%. Failure criteria were set at two consecutive CRM values reporting more than two standard deviations (SD) from the expected value, or a single CRM



#### Commentary

- reporting a value more than three SDs from the expected value.
- o In 2016, Austral submitted a total of 134 CRM samples, sourced from two distinct gold CRMs, and two gold and silver CRMs, for analysis alongside 3,389 samples for an insertion rate of 4.0%. There were only eight failures which required reanalysis of the original samples.
- A total of 109 coarse blank samples were inserted during the 2016 drill program, for an insertion rate of 3%. A total of 13 samples returned values above the 0.05 g/t Au limit. Subsequent testing showed at least three of these locally derived samples contained some gold.
- A total of 102 core duplicates were collected and analyzed during the 2016 drill program. For gold, the average grade for the original samples was 11.23 g/t Au, and the average grade for the core duplicate samples was 10.62 g/t Au. This gives a correlation of 95.9%. For silver, the average grade for the original samples was 102.13 g/t Ag, and for the average grade for the core duplicate samples was 103.23 g/t Ag. This gives a correlation of 98.93% for the silver samples.
- RPA considers the QA/QC programs to meet industry standard practice at the time of completion and the results to be acceptable.
- Results and discussion on QA/QC programs are described in CPR Section 11 and CPR Section 12.

#### Verification of Sampling and Assaying

#### Guanaco

- During a 2015 site visit, Amec Foster Wheeler conducted various dataverification procedures:
  - Review of drill-hole folders: GCM keeps folders for each drill hole in the mine office. Amec Foster Wheeler reviewed four folders, corresponding to 20% of the drill holes from the 2014-2015 campaign. At the time of the site visit the folders were still being organized, and some of them did not include yet original logs or copies of assay certificates.
  - Review of down-hole survey and assay data: Amec Foster Wheeler conducted spot checks of down-hole survey data from original paper records with the digital records in the database and did not identify any errors. Amec Foster Wheeler also compared 226 original assays, corresponding to 13% of the assays from the 2014-2015 campaign, with the values recorded in the database, and did not identify any differences. Amec Foster Wheeler included in this check all assays exceeding 15 g/t Au.
  - Interpretation of geology and mineralization: Amec Foster Wheeler reviewed the interpreted geological cross-sections in order to assess the spatial continuity. During the review, Amec Foster Wheeler did not find significant discrepancies.
  - Amec Foster Wheeler recognizes that the interpretation generally respects the data recorded in the logs and cross-sections, as well as the interpretation from adjoining sections, and is consistent with the known characteristics of this deposit type.
  - Core review: Amec Foster Wheeler reviewed selected core sections of two drill holes (DDH-1076 and DDH-1082), and observed that the core was properly cut. The observed lithological contacts approximately matched the logged depths. Core recovery in the reviewed holes usually exceeded 80%.
  - RPA is of the opinion that the practices and procedures used to generate the Guanaco database comply with industry standards and are acceptable to support Mineral Resource and Ore Reserve estimation.



#### Commentary

- RPA reviewed the methods and practices used by Austral to generate the
  resource database (including drilling, sampling, analysis, and data entry) and
  found the work to be appropriate for the geology and style of mineralization.
   RPA checked a select number of drill holes to verify the described methods and
  application of practices. Other checks included:
  - Use of a handheld GPS unit to check the collar positions of GTA-1, GTA-2, GTA-4, GTA-7, AKCOM-004, ACKCOM-007, AM-01, AM-03, AM-06,AM-08,AM-09,AM-11, AM-12, AND AM-13. The collar positions were verified.
  - Review of the drill hole traces in 3D, level plan, and vertical sections. No unreasonable geometries were found.
  - Query of the database for unique header, duplicate holes, and overlapping intervals. No issues were identified.
  - Ensure that the total depth recorded in each drill hole database table was consistent. No issues were identified.
  - Visit to the core handling facility.
  - Review of core for holes GTA-1, GTA-2, GTA-3, GTA-4, GTA-5, GTA-6, GTA-7, AKCOM-005, AKCOM-006, ACKOM-009, ACKOM-010, AKCOM-011, ACKOM-012, AKCOM-013, ACKOM-014, AM-01, AM-03, AM-05, AM-06, AM-08, AM-09, AM-11, AM-12, AND AM-13
- RPA is of the opinion that the practices and procedures used to generate the Amancaya database comply with industry standards and are acceptable to support Mineral Resource and Ore Reserve estimation.

#### Location of Data Points

#### Guanaco

- Three dimensional spatial locations were calculated using collar locations and downhole survey measurements with curved path geometries.
- From 2006 onwards, downhole surveying for the infill and exploration drill programs was undertaken by GCM using the gyroscope method. From 2008 all drill hole collars have been surveyed using a global positioning system (GPS) instrument.

#### **Amancaya**

- Three dimensional spatial locations were calculated using collar locations and downhole survey measurements with curved path geometries.
- Yamana drill hole collars were surveyed. Downhole gyro surveys were completed for all holes.
- Drill collars were surveyed by Cenizas and downhole Maxibor surveys were completed for all holes.
- Austral drill collars were positioned using a differential GPS unit and downhole gyro surveys were completed in all holes. Final drill collar positions were surveyed using a total station instrument.
- The surface topography is represented by a three dimensional digital terrain model (DTM).

# Data Spacing and Distribution

- Drill hole spacing generally ranges from 25 m to 250 m.
- The current drill and sampling data spacing is sufficient to establish geological and grade continuity to various degrees as is reflected in the applied classifications of Mineral Resource and Ore Reserves.



#### Commentary

GCM collected RC samples at 1 m, 1.5 m, or 2 m intervals.

#### **Amancaya**

- Drill hole spacing generally ranges from 25 m to 200 m.
- The current drill and sampling data spacing is sufficient to establish geological and grade continuity to various degrees as is reflected in the applied classifications of Mineral Resource and Ore Reserves.
- Yamana collected RC samples at 2 m intervals. The dominant sampling length by Cenizas and Austral was 2 m but altered to respect geological boundaries.

#### Orientation of Data in Relation to Geological Structure

#### Guanaco and Amancaya

- Drill sections are generally normal to the strike of the mineralization.
- In general, the holes were drilled to cut the mineralization in a perpendicular orientation except at depth where the sub-vertical nature of the veins required oblique intersections to minimize hole lengths.
- Overall, there is considered to be no sampling bias from the orientation of the drilling.

## Sample Security

#### **Guanaco and Amancaya**

- Sample security relied upon the fact that the samples were always attended or stored in designated sampling areas. Sample collection, preparation, and transportation have always been undertaken by Company or laboratory personnel using their own vehicles. Chain of custody procedures consisted of filling out sample submittal forms that are sent to the laboratory with sample shipments to make certain that all samples were received by the laboratory.
- Assay receipt was electronic and restricted to authorized personnel.
- In RPA's opinion, the chain of custody and sample security measures are adequate and completed to industry standard.

## Audits or Reviews

#### **Guanaco and Amancaya**

- RPA reviewed the methods and practices used to generate the resource database (including drilling, sampling, analysis, and data entry) and found the work to be appropriate for the geology and style of mineralization. RPA and Amec checked a select number of drill holes to verify the described methods and application of practices. Other checks included:
  - o Review of the drill hole traces in 3D, level plans, and vertical sections.
  - Query of the database for missing or repeated data, unique header, duplicate holes, and gaps or overlapping intervals.
  - Comparison of the gold and silver samples of assay certificates to the Vulcan database used to generate the Mineral Resource estimate.
- RPA is of the opinion that the practices and procedures used to generate the databases comply with industry standards and are acceptable to support Mineral Resource and Ore Reserve estimation.



#### SECTION 2 – REPORTING OF EXPLORATION RESULTS

#### Criteria

#### Commentary

#### Mineral Tenement and Land Tenure Status

#### Guanaco

- The Guanaco Mine is located 220 km southeast of Antofagasta. The coordinates of the centre of the site are N 7,223,000 and E 445,000 (UTM PSAD-56). The Guanaco property, including regional concessions, comprises 343 concessions totalling 41,951 ha. There are claims held by third parties within the Guanaco Project area that are excisions from the GCM tenure holding, and are not included in the Project.
- There are numerous overlaps in the claim boundaries, and some claims within the Guanaco area are held by third parties. A second layer of mining rights has been established over existing rights to enhance protection and the area is being monitored on a permanent basis to prevent conflict with third-party rights.
- GCM made an application to the state of Chile for 257.5 ha of surface rights (Judicial Rights) to cover proposed infrastructure sites in a submission dated April 26, 2010. The submission was approved on November 15, 2011.
- Total water rights are for 18.79 L/s and current use is about 7.50 L/s.
- There is a 3% royalty payment associated with the Guanaco Mine.
- All necessary statutory permits have been granted and the requirements have been met. GCM is in compliance with all environmental and work permits.
- Additional land tenure information is presented in CPR Section 4.

- The Amancaya Project is located at coordinates 7,172,000 North and 418,500 East in Agua Verde district, in Antofagasta Province (Region II) of Chile, 70 km to the east of the city of Taltal. The property consists of eight individual exploitation mining concessions covering a total area of 1,755 ha. As is common in Chile, a secondary layer of concessions have been placed over the original concessions for security of ownership. These concessions cover 1,090 ha. An additional two exploitation mining concessions are currently in application. The property is 100% owned by Guanaco Compañía Minera SpA (GCM), and the Amancaya deposit is located within the property boundaries. GCM is a 99.9% owned subsidiary of Guanaco Mining Company Ltd. which is 100% owned by Austral Gold.
- In February 2016, GCM completed an option and sale agreement with Revelo Resources Corporation (Revelo) whereby Austral will have the sole and exclusive option and right to acquire a 100% undivided interest in Revelo's San Guillermo project. The San Guillermo property surrounds the Amancaya Project. These concessions cover a total area of 12,175 ha.
- Revelo will retain a 0.5% NSR royalty on all metals produced from their project concessions. In addition, the agreement provides for Austral to take responsibility for the payment of underlying existing royalties to both Minera Fuego Limitada and Sociedad Quimica y Minera de Chile S.A. (SQM) on any and all future production from the Revelo project property.
- The surface rights are controlled by the federal government and access is normally granted as required.



#### Commentary

- The current Amancaya water rights amount to 1.6 L/s of underground water, located in Agua Verde sector of Taltal County. The extraction well called "Zazzali" is located at 7,189,625.540 North and 400,453.353 East.
- A royalty of 2.25% of the net smelter return (NSR) on all production from the Amancaya mining concessions is payable to Meridian Gold Inc. (Meridian)/Yamana.
- All necessary statutory permits have been granted and the requirements have been met. Austral is in compliance with all environmental and work permits.
- Additional land tenure information is presented in CPR Section 4.

# Exploration Done by Other Parties

- Gold mineralization was discovered at Guanaco in 1878 by miners from the nearby Cachinal silver mines. From 1887 until 1890, more than 200 underground mines were developed, and approximately 200,000 oz of gold were produced from high-grade veins. Extensive gold production continued until 1928, when low gold prices forced the closure of the mines.
- In 1930, the Chatal Company acquired most of the claims in the district, and continued moderate-scale exploration and mining until 1960. Total gold production prior to 1986 has been estimated at approximately 1 Moz.
- During 1987, GCM became operator of the Project by undertaking an underground production at a minimum rate of 500 t/d within six months. The operation produced an estimated 75,000 oz gold to the end of 1991.
- Amax entered into a purchase-option agreement with GCM effective 1 April 1991, and subsequently commenced mapping, geochemical sampling, and reverse circulation drilling. A pre-feasibility study was completed the same year. In April 1992, Amax acquired a 90% interest in the Project for US\$35 million through a wholly owned subsidiary.
- Open-pit mining commenced in early 1993, with gold recovered from heap leach pads and a Merrill Crowe recovery plant. From 1993 to 1996, in addition to mining operations, work completed included mineral resource and mineral reserve estimation, airborne and ground geophysical surveys, rock chip and grab sampling, geological mapping, and RC and core drilling. In 1997, the operation was placed on care and maintenance due to a combination of low gold prices and poor metallurgical recoveries due to the presence of copper. Production during the Amax period is estimated at 346,000 ounces.
- In 1999, Kinross acquired Amax, and operations were conducted by Kinross' indirect subsidiary Kinam Guanaco. During 1999 and 2000, Kinross conducted exploration core and RC drilling, data reviews, geological mapping and chip sampling, preparation and description of petrographic samples, and ground geophysical surveys.
- In 2002, Golden Rose, a subsidiary of AGD, entered into a purchase-option agreement with Kinross, which was executed in March 2003. From 2003 to 2012, Austral Gold (until 2007 AGD) undertook data reviews, core and RC drilling, mineral resource and mineral reserve estimation, hydrological, geotechnical and metallurgical studies, reviews of social and environmental conditions, and assessments of existing infrastructure and equipment, and commissioned a feasibility study during 2009–2010.
- The existing infrastructure on site was refurbished and upgraded between



September 2009 and March 2010. GCM restarted stacking operations in September 2010, and the first doré bar was poured in December 2010. A total of approximately 230,000 ounces of gold and 342,000 ounces of silver were produced between 2010 and December 2016.

#### **Amancaya**

- Small scale exploration and mining of copper and gold in the Rosario del Llano and Juanita veins during the 1950s.
- Copper porphyry exploration (on the adjacent Cerro Morros Blancos property) and soil and rock geochemistry during the 1990s by Recursos Mineros Andinos and Rio Tinto. No results are available.
- Rock sampling and trenching was completed in 2003 by Placer Dome Inc.
- Geophysical surveys, surface and trench sampling, geological mapping, radiometric dating, and fluid inclusion analysis were completed by Meridian/Yamana from 2004 to 2008.
- Yamana completed a total of 202 RC drill holes for 54,782 m and 16 trenches totalling 486.1 m.
- Resampling of trenches and some resampling of historic drill core was performed by Cenizas in 2009.
- In 2009, Cenizas carried out a drill campaign totalling 5,054 m in 23 holes to confirm the thickness of the Veta Central, the distribution of gold and silver grades within the vein and host rocks, and the bulk density of the mineralization.

#### Geology Guanaco

- The Guanaco deposits are considered examples of high-sulphidation epithermal systems.
- The most important structural features related to gold mineralization at Guanaco follow east—west and east—northeast—west—southwest trends. Gold-bearing structures are all steeply inclined ledges composed of massive vuggy and cryptocrystalline quartz of replacement origin. Individual ledges are up to five metres wide, but more commonly they seem to comprise several impersistent siliceous strands separated by altered, but barren, wall rock. The ledge structures extend for at least four kilometres along strike, although gold concentrations are confined to relatively restricted shoots.
- Native gold forming lamellae and coarse and fine grains is the most important economic mineral, although it is rarely visible. Disseminated pyrite is the most common mineral in the non-weathered mineralized material; enargite, luzonite and minor chalcopyrite are present in the deeper horizons. Chalcocite and covellite, together with Cu carbonates, silicates, and a number of rare Cu arsenates (chenevixite, ceruleite) have been found in secondary-enrichment zones.
- Additional geology and mineralogy information is presented in CPR Sections 7 and 8.

- The mineralization identified within the Amancaya Property is an example of lowsulphidation epithermal deposition of gold and silver.
- The gold-silver mineralization at Amancaya is structurally and lithologically



| Criteria   | Commentary   |  |  |  |  |  |
|--|--|--|--|--|--|--|
|  | controlled and occurs in quartz veins and stockworks.  |  |  |  |  |  |
|  | • The gold at Amancaya is commonly associated with sphalerite and occurs as native grains within the quartz. Electrum is also found. Common grain sizes range from 20 µm to 60 µm, however, some wormy forms are noted between 100 µm and 300 µm. The more common forms of silver correspond to silver sulphosalts (pyrargerite, stromeyerite, freibergite, and chlorargyrite), native silver, and electrum in limonite zones. The grain size of the silver sulphosalts varies between 0.02 mm and 0.03 mm, with some crystals up to one millimetre. |  |  |  |  |  |
|  | <ul> <li>Additional geology and mineralogy information is presented in CPR Sections 7<br/>and 8.</li> </ul>  |  |  |  |  |  |
| Drill Hole   | Guanaco and Amancaya   |  |  |  |  |  |
| Information  | • Detailed information in relation to the drill holes forming the basis of the Mineral Resource estimate is not included in this report on the basis that the dataset is too large.  |  |  |  |  |  |
|  | <ul> <li>Additional drill hole information is presented in CPR Section 10.</li> </ul>  |  |  |  |  |  |
| Data<br>Aggregation<br>Methods                       | Not applicable – reporting Mineral Resources and Ore Reserves.   |  |  |  |  |  |
| Relationship   | Guanaco and Amancaya   |  |  |  |  |  |
| Between<br>Mineralization<br>Widths and<br>Intercept | • The majority of drilling is oriented close to perpendicular to the known strike orientation of the mineralization. Downhole intersections are generally oblique to the dip of mineralization due to the sub-vertical attitude of the veins.  |  |  |  |  |  |
| Lengths  | <ul> <li>The intersection length is measured down the hole trace and may not be the true<br/>width.</li> </ul>   |  |  |  |  |  |
| Diagrams   | Guanaco and Amancaya   |  |  |  |  |  |
|  | <ul> <li>Appropriate maps and sections have been generated that show significant<br/>features of the deposit. See CPR Sections 7 and 10.</li> </ul>  |  |  |  |  |  |
| Balanced<br>Reporting                                | Not applicable – reporting Mineral Resources and Ore Reserves.   |  |  |  |  |  |
| Further Work   | Guanaco  |  |  |  |  |  |
|  | <ul> <li>A number of near-mine and external gold prospects have been outlined over the<br/>Project exploration history that are considered to warrant exploration<br/>consideration.</li> </ul>  |  |  |  |  |  |
|  | Amancaya   |  |  |  |  |  |
|  | <ul> <li>The Central Vein and Julia Vein are not completely delineated and many other<br/>targets on the property remain to be fully explored.</li> </ul>  |  |  |  |  |  |



# SECTION 3 – ESTIMATION AND REPORTING OF MINERAL RESOURCES

| Criteria       | Commentary  |
|----------------|---|
| Database       | Guanaco and Amancaya  |
| Integrity      | <ul> <li>All drill hole data used in the Mineral Resource estimate is held within an<br/>industry standard relational digital database.</li> </ul>  |
|                | <ul> <li>All holes were approved by appropriate Geological Management.</li> </ul>   |
|                | <ul> <li>RPA has carried out a number of checks and validation routines on the data to ensure suitability for Mineral Resource estimation and classification. These tests consisted of cross-referencing between data tables in the database, including downhole surveys versus hole lengths, and assay data intervals versus survey lengths. No significant errors were detected.</li> </ul> |
|                | <ul> <li>Only nominated and qualified staff have access to the database.</li> </ul>   |
|                | <ul> <li>RPA has carried out a number of checks and validation routines on the data to<br/>ensure suitability for Mineral Resource estimation and classification.</li> </ul>  |
| Site Visits    | <ul> <li>A RPA Competent Person completed site visits to Guanaco in October 2016,<br/>and to Amancaya in October 2016, August 2015, and August 2007.</li> </ul>   |
| Geological     | Guanaco   |
| Interpretation | <ul> <li>In 2006, GCM commissioned an independent consultant, Eduardo Magri, to<br/>prepare the Mineral Resource estimates for Cachinalito Central, Cachinalito<br/>West and Dumbo West. The geological models have not been updated.<br/>Modifications were made to the models to account for production depletion, and<br/>for changes in cut-off grades.</li> </ul>                        |
|                | <ul> <li>GCM constructed three-dimensional wireframe models of the vein systems in<br/>each of the Cachinalito and Dumbo West deposits. In every mineralized zone, a<br/>main vein was modelled together with several minor structures parallel to the<br/>main vein. The grade-shells were interpreted using a 1.0 g/t Au cut-off.</li> </ul>  |
|                | <ul> <li>GCM provided triangulated surfaces representing grade shells to be used as<br/>constraints on the mineral resource estimate. The shells, as originally designed<br/>in 2006, assumed open-pit mining methods, and as a result, a 0.5 g/t Au cut-off<br/>was used.</li> </ul>   |
|                | <ul> <li>Guanaco provided wire-framed models of the veins represented by a grade shell<br/>interpreted at a 1.0 g/t Au cut-off grade.</li> </ul>  |
|                | <ul> <li>RPA is of the opinion that the wireframing meets industry standard and the<br/>wireframes are suitable for constraining block estimates.</li> </ul>  |
|                | <ul> <li>Vein continuity is relatively good. It is affected by stratigraphy and structure.</li> <li>Grade continuity within the veins is variable. Close-spaced drill hole spacing is sufficient to capture grade and geology changes.</li> </ul>   |
|                | Amancaya  |
|                | <ul> <li>Geological modelling was conducted using vertical sectional interpretation in<br/>Maptek's Vulcan software.</li> </ul>   |
|                | <ul> <li>Mineralized envelope models at 0.5 g/t Au and 2.0 g/t Au cut-off grades for the<br/>Central, Amarillo, and Julia veins were developed using Maptek's Vulcan</li> </ul>   |



#### Commentary

software.

- The geological confidence is moderate to high where significant diamond drilling has been undertaken. Geological confidence can be considered low to moderate where less drilling has been completed.
- RPA visually inspected the wireframes and noted only minor issues with the wireframes, including some irregularities due to over interpretation (attempts to exclude low grade or to include high grade). These issues were addressed. Within the Central Vein, three additional wireframes representing small, continuous zones of mineralization and another less continuous wireframe, were modelled at a gold cut-off grade of 2.0 g/t Au. Within the Julia vein, an additional wireframe (411) outlining a less continuous zone was modelled at a gold cut-off grade of 0.5 g/t Au.
- RPA is of the opinion that the wireframing meets industry standard and the wireframes are suitable for constraining block estimates.
- Vein continuity is relatively good. It is affected by stratigraphy and structure.
   Grade continuity within the veins is variable. Close-spaced drill hole spacing is sufficient to capture grade and geology changes.

#### **Dimensions**

#### Guanaco

- The overall Guanaco area comprises numerous east-west oriented veins dipping sub-vertically over a strike length of approximately four kilometres.
- Individual vein groups have strike lengths between 400 m to 1,000 m and dip lengths from 100 m to 200m.
- High-grade shoots (up to 180 g/t Au), 0.5 m to 3.0 m wide, have been mined. Lower-grade halos, below 2 g/t Au, reach 20 m in width.

#### **Amancaya**

- The overall Amancaya Project area comprises numerous north-south oriented veins dipping sub-vertically over a strike length of approximately seven kilometres.
- The Central Vein (Sectors II and III) currently extends for over 1.5 km along strike and over 300 m in depth, with thickness varying from 0.5 m to seven metres. The Julia Vein (Sector I) currently extends for over 400 m along strike, and over 160 m in depth, with thicknesses from one metre to four metres. The resource at Cerro Amarillo extends approximately 280 m in length and 100 m in depth, with thicknesses varying from one metre to three metres.

# Estimation and Modelling Techniques

- The Mineral Resource estimate is based on RC chip samples and diamond drill core using Ordinary Kriging (OK) or the Inverse Distance Squared (ID<sup>2</sup>) methods to inform blocks constrained by wireframes modelled using sectional interpretation at a nominal 0.5 g/t Au and 1.0 g/t Au wireframing cut-off grades.
- Block size in all sectors is either two metres or 2.5 m cubic blocks. Parent blocks are not sub-celled.
- Maptek's Vulcan software was used to generate the wireframes and block modelling.
- The drill hole data was composited to a target length of one metre or 1.5 m



based on the length analysis of raw intercepts. Composite length outside the mineralized wireframes was set at two metres.

- Gold and silver composites were capped for outliers in sector I based on examination of cumulative probability plots. These plots indicated that outliers occur in the upper portion of the grade distribution, with frequencies from 1% to 5%. Outlier restrictions were also used which allowed the interpolation of higher grades over short distances.
- At Cachinalito Central, Cachinalito West, and Dumbo West, Eduardo Magri previously calculated and modelled correlograms for gold, silver and copper in the principal directions defined by the orientation of the grade shell using composites lying inside the grade-shell. Outside the grade shell, an inverse distance interpolation approach was used. RPA agreed that the parameters used for the experimental variogram calculation are appropriate and that the models adopted for the resource estimation are acceptable for all three deposits. For Defensa and Perseverancia, down-the-hole and directional correlograms were calculated for gold. The variograms showed a very high nugget effect and absence of structure. Directional and down-the-hole correlograms of gold and silver were calculated, inside and outside the grade shells, separately for the Natalia zone.
- The kriging plan developed for the Cachinalito West, Cachinalito Central and Dumbo West deposits consisted of three estimation runs, each one with increasing decreasing search ranges. For Defensa and Perseverancia, gold, silver and copper grades were estimated using ID<sup>2</sup>. The grade estimation was completed in four passes including a preliminary pass to restrict the influence of high grades. At Natalia, estimation plans were defined for each grade element inside and outside the grade-shell models, four estimation passes were completed, and grade interpolation was performed using hard boundaries across grade-shell model.
- The grade estimation was validated by GCM and RPA using wireframe validation, visual inspection of interpolated block grades versus underlying data, statistical comparisons, and swath plots.
- Additional information on estimation and modelling techniques is presented in CPR Section 14.

- The Mineral Resource estimate is based on RC chip samples and diamond drill core using the Inverse Distance Squared or Cubed (ID<sup>2</sup> or ID<sup>3</sup>) methods to inform blocks constrained by wireframes modelled using sectional interpretation at a nominal 0.5 g/t Au and 2.0 g/t Au wireframing cut-off grades.
- Block size in all sectors is 2 m X 2 m x 2 m except in the open pit portion of sectors II and III where block size is 1 m x 2 m x 2.5 m. Parent blocks are subcelled to the geological boundaries to preserve volume.
- Maptek's Vulcan software was used to generate the wireframes and block modelling.
- The drill hole data was composited to a target length of one metre in sectors II, III, and IV based on the length analysis of raw intercepts. Sector I composite length remained at two metres.
- Gold and silver composites were capped for outliers in sector I based on



examination of cumulative probability plots, quantile-quantile plots, basic statistics, and histograms by Austral in the 0.5 g/t Au and 2.0 g/t grade shells in Sector I. Capping levels were chosen based on the 96.5th percentile of the grade distribution for each sector. Raw gold and silver assays were capped by RPA in the 0.5 g/t Au and 2.0 g/t grade shells in Sectors II, III and IV, based on examination of basic statistics, histograms, probability plots, and decile analysis.

- The Amancaya Project contained insufficient data to produce reliable directional variogram models. An omnidirectional variogram was constructed by RPA in Sectors II and III, and was used to inform classification of the final block model. The total variogram range was modelled at 60 m.
- Within Sectors I, gold and silver were estimated into the high grade domains using ID² in a four pass interpolation run, employing successively fewer composite restrictions. Gold and silver in the low grade domains in Sector I were estimated in a single pass, using a search ellipse equal in dimensions and orientation to Pass 4 of the respective high grade domain for each Sector. The interpolation approach for the mineralized zones within the Central Vein and Julia vein for gold and silver included three nested estimation runs, each using a search ellipse oriented parallel to the general vein trend, and hard boundaries. Only blocks occurring wholly or partially within the mineralization wireframes were interpolated. All grades were interpolated using ID³. Each subsequent pass employed larger search ellipse dimensions and fewer composite restrictions. Residual composites were included in the grade estimation, all composites were length weighted.
- No by-product recoveries were considered.
- The grade estimation was validated by Austral and RPA using wireframe validation, visual inspection of interpolated block grades versus underlying data, statistical comparisons, and swath plots.
- Additional information on estimation and modelling techniques is presented in CPR Section 14.

#### Cut-off Parameters

#### Guanaco

- Mineral Resources are reported at a 1.5 g/t AuEq cut-off grade where AuEq = Au + (0.0134 \* Aq).
- Mineral Resources are estimated using a long-term gold price of US\$1,300 per ounce, and a silver price of US\$20 per ounce.
- Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag based on a gold and silver price of \$1,300/oz and \$20/oz and recoveries of gold and silver of 92% and 80% respectively.

- The Mineral Resources at Amancaya are reported considering two mining methods with varying cut-off grades.
- The open pit Mineral Resources are constrained by a Whittle pit shell with a cut-off grade of 1.5 g/t gold equivalent (AuEq). RPA notes that the pit discard cut-off grade is only applicable to the resource blocks situated inside the Whittle open pit shell generated with the same input assumptions. Mining costs are incorporated in the Whittle process and are not included in the pit discard cut-off grade calculation. Consequently, it is the Whittle process that defines the



approximate pit size and identifies the blocks that will potentially be mined and transported to the pit rim. Blocks with grades above the discard cut-off grade will potentially be processed as ore and the rest will be treated as waste.

- Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based on a gold and silver price of US\$1,300/oz and US\$20/oz and recoveries of gold and silver of 92% and 80%, respectively.
- There is additional material located outside of the open pit shell but within the wireframe models, and RPA is of the opinion that this material has potential to be excavated using underground mining methods. For this underground material, RPA used a 2.5 g/t AuEq cut-off grade in reporting of Mineral Resources. Underground material is reported from the original sub-blocked models and restricted to areas with geological support and grade continuity.

#### Mining Factors or Assumptions

- Minimum width 1.5 m for the underground resources at Guanaco is 1.5 m.
- Minimum width for the open pit resources is one metre and 1.5 m for the underground resources at Amancaya.

#### Metallurgical Factors or Assumptions

 Preliminary metallurgical testwork estimates average gold recoveries of 92% and average silver recoveries of 80%.

# Environmental Factors or Assumptions

All necessary statutory permits have been granted and the requirements have been met. Austral is in compliance with all environmental and operating permits at Guanaco and Amancaya.

#### Classification Guanaco

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- Definitions for Mineral Resource categories are consistent with those defined by JORC (2012).
- The following criteria were used to aid the classification of blocks:
  - Variograms
  - Drill spacing
  - Grade continuity
- In RPA's opinion, all relevant factors have been accounted for and the overall classification of Mineral Resources for Guanaco is reasonable.

- Definitions for Mineral Resource categories are consistent with those defined by JORC (2012).
- The following criteria were used to aid the classification of blocks:
  - Variograms
  - Drill spacing
  - Grade continuity
  - Geological continuity
- There were no Measured Mineral Resources.
- Indicated Mineral Resources were limited to areas with a drill hole spacing equal
  to or greater than 50 m, equal to 80% of the omnidirectional variogram sill. A
  polygon was used to create a continuous zone of Indicated Mineral Resources in



| Criteria  | Commentary   |
|---|--|
|   | Sector II.   |
|   | <ul> <li>All other areas were limited to a classification of Inferred.</li> </ul>  |
|   | <ul> <li>In RPA's opinion, all relevant factors have been accounted for and the overall<br/>classification of Mineral Resources for Amancaya is reasonable.</li> </ul>   |
| Audits or<br>Reviews                                  | <ul> <li>The grade estimation was validated by GCM and RPA using wireframe<br/>validation, visual inspection of interpolated block grades versus underlying data,<br/>statistical comparisons, and swath plots.</li> </ul> |
| Discussion of<br>Relative<br>Accuracy /<br>Confidence | No uncertainty studies have been carried out to establish the confidence and accuracy of the Mineral Resource estimate.  |



#### **SECTION 4 – ESTIMATION AND REPORTING OF ORE RESERVES**

| Criteria                                      | Commentary  |
|---|---|
| Mineral<br>Resource                           | <ul> <li>Mineral Resource estimates for Guanaco and Amancaya as described in the<br/>previous sections have been converted to Ore Reserves.</li> </ul>  |
| Estimate for<br>Conversion to<br>Ore Reserves | The Mineral Resources are reported inclusive of the Ore Reserves.   |
| Site Visits                                   | <ul> <li>Site visits were carried out by Chester Moore, P. Eng., on October 25 to 27, 2016 and previously from August 5 to 8, 2015, and on August 27 and 28, 2007. Jason Cox, Ian Weir, and Kathleen Altman visited the site from February 27 to March 2, 2017. A full review of the Guanaco Mine and Amancaya Project was carried out.</li> </ul>  |
| Study Status                                  | <ul> <li>The level of study would be considered a pre-feasibility study (PFS). The<br/>Guanaco Mine has been in operation since 2010 under Austral and the costs<br/>and production inputs are well understood.</li> </ul>  |
| Cut-off<br>Parameters                         | • A cut-off grade of 1.0 g/t Au and 1.5 g/t Au (rounded up from 0.97 g/t Au and 1.44 g/t Au) was used for development drift material that must be mined as part of the logical mining sequence when no additional development is required for underground mining at Guanaco and Amancaya, respectively. A cut-off grade of 2.0 g/t Au and 2.5 g/t Au was used for stopes for underground mining at Guanaco and Amancaya, respectively. Cut-off grades are based on inputs that are well understood as a result of Guanaco being a producing mine. Cut-off grades are calculated based on the cost, recovery, and revenue assumptions that were derived based on the current operation at Guanaco. |
| Mining Factors or                             | <ul> <li>Open pit Ore Reserves were determined using a Whittle pit optimization to<br/>guide a final detailed pit design.</li> </ul>  |
| Assumptions                                   | <ul> <li>Dilution of 50% was applied to the open pit Ore Reserves at Amancaya to<br/>account for the relatively thin nature of the deposit.</li> </ul>  |
|   | <ul> <li>Mining recovery of 100% is based on the high quantities of dilution that are<br/>expected.</li> </ul>  |
|   | <ul> <li>Underground mining has been successfully carried out at Guanaco using Sub-<br/>level Open Stoping (SLOS) and this method will be applied at Amancaya.</li> </ul>   |
|   | <ul> <li>Ore Reserves are estimated using an average long-term gold price of US\$1,300<br/>per ounce and silver price of US\$20 per ounce.</li> </ul>   |
|   | <ul> <li>Gold Equivalents (AuEq) were calculated as AuEq = Au + 0.0134 x Ag, based<br/>on a Au and Ag price of \$1,300/oz and \$20/oz and recoveries of Au and Ag of<br/>92% and 80%, respectively.</li> </ul>  |
|   | <ul> <li>A minimum mining width of 1.5 m was used for stopes and 3.5 m for drifts.</li> </ul>   |
|   | • Stope dilution: 0.5 m in the hanging wall and 0.5 m in the footwall (1.0 m total).  |
|   | <ul> <li>Drift dilution: 0.25 m in each of the side walls (0.5 m total).</li> </ul>   |
|   | • Bulk density is 2.5 t/m <sup>3</sup> .  |
|   | <ul> <li>Mining recovery of 100% based on positive reconciliation results against the<br/>Reserve Model.</li> </ul>   |
|   | Inferred Resources are treated as waste and not included in the Ore Reserve   |



#### Criteria Commentary estimation. Ore is accessed using ramp access. Metallurgical The metallurgy at Guanaco is well known and understood because it is a **Factors or** mature operation that has been operating as a heap leach operation for a **Assumptions** number of years. Limited testwork has been done to evaluate how the ore will respond in the milling circuit, however, the ore responds well to cyanide leaching so the process should be effective. Limited testwork has been conducted for the Amancaya deposit and the samples have not been representative due to the lack of material available for testing. Environmental Due to the remote location, Guanaco and Amancaya do not have a large impact on local residents and the populace is generally supportive of mining operations. GCM is in compliance with all permits required to operate both the Guanaco and Amancaya mines. Infrastructure Guanaco is a mature operation and has all the required infrastructure to support its operation as well as the operation of Amancaya. To support the operation of the new agitated leach milling circuit, 34.8 km long 33 kV power line and substation were constructed to transport power from the Central Interconnected System (SIC, Sistema Interconectado Central) to the Guanaco mine site. The diesel-based power generation system that was utilized to support the heap leaching operation will remain as a backup system in case of emergencies and/or failure of the SIC supply. The power supply at Amancaya is provided by diesel power generators. GCM has water exploitation rights for 18.79 L/s. Of this total, 4.84 L/s come from surface water catchment areas in the Domeyko Cordillera (approximately 30 km from the Guanaco Mine). The remaining 13.95 L/s comes from wells located at Pampa Yerbas Buenas, Quebrada Guanaco, Quebrada Sandón, the lower part of the Quebrada Pastos Largos and Agua Verde The camp has accommodation, food and recreation infrastructure and is located close to the Guanaco Mine site access gatehouse. The reconditioning included minor modifications to the mess hall/cafeteria and kitchen areas to leave them functional and meeting current regulations. Currently the camp has 167 rooms in two types of modules with a capacity for 333 people. One type of module has rooms with private bathrooms and the other type has rooms with a shared bathroom. The camp facilities meet current legal requirements and the camp has been officially approved by the authorities (Health Service of Antofagasta). Costs Capital costs for development are based on actual unit rate expenditures for Guanaco and have been adapted accordingly for Amancaya. Operating costs are based on actuals for mining and G&A. Processing costs are based on actuals for crushing and estimates based on first principles have been made for the remaining areas within the process flow sheet. All prices and costs are expressed in US\$.



#### Commentary

- Transportation charges are based on a fixed and variable component and assume 24 shipments of doré product per year.
- Refining, insurance, and transport charges are based on current contracts.
- Income taxes are 25% in 2017, 25.5% in 2018, and 27% for the remaining years in the LOM.
- A royalty of 3% for Guanaco and 2.25% for Amancaya is applied to the net smelter return.

## Revenue Factors

- Gold and silver at refinery 99.9% and 99.0% payable, respectively.
- All costs and revenues are expressed in US\$.
- Metal prices: LOM average of US\$18.88/oz silver and US\$1,284/oz gold, based on consensus of independent forecasts for annual prices.
- Net Smelter Return includes doré refining, transport, and insurance costs.
- Revenue is recognized at the time of production.
- Average NSR per tonne is US\$236.

#### Market Assessment

- The principal commodity produced at Guanaco and Amancaya is gold, which is freely traded, at prices that are widely known, so that prospects for sale of any production are virtually assured.
- The company has a contract with Asahi Refining Canada Ltd. (ARC, formerly Johnson Matthey Ltd.) for doré bullion refining and the purchase of the products from the doré bullion. The ARC refinery has the capacity, the facilities, and the necessary permits and authorizations to perform the obligations and services under a formal contract in a professional manner and in accordance with generally accepted industry standards. The transport and refining contract terms are similar to those typically used in the industry for the shipment of gold doré.
- GCM uses a door-to-door system, in which the refiner is responsible for the transportation and insurance costs once it takes possession of the doré from GCM on site. The refinery arranges the transportation and insurance from the Guanaco Mine to the ARC refinery facilities.

#### **Economic**

- Considering the Mine on a stand-alone basis, the undiscounted pre-tax cash flow totals \$104 million over the mine life.
- Annual production during operations varies by year, averaging approximately 46,000 ounces of gold and 314,000 ounces of silver per year.
- After-Tax Net Present Values (NPV) at various discount rates are:
- 5% discount rate is \$71.6 million.
- 7.5% discount rate is \$66.6 million.
- 10% discount rate is \$62.1 million.

| Parameter<br>Variables | Units   | Lowest | Lower | Base  | Higher | Highest |
|------------------------|---------|--------|-------|-------|--------|---------|
| Gold Price             | US\$/oz | 1,027  | 1,156 | 1,284 | 1,413  | 1,541   |
| Recovery               | % Au    | 88%    | 89%   | 91%   | 93%    | 95%     |
| Head Grade             | g/t Au  | 4.50   | 5.06  | 5.62  | 6.19   | 6.75    |



| Criteria  | Commentary   |   |  |   |   |  |  |  |  |  |
|---|--|---|--|---|---|--|--|--|--|--|
|   | Operating Cost   | \$ millions   | 137  | 149   | 161   | 190  | 218  |  |  |  |
|   | Capital Cost   | \$ millions   | 41   | 44  | 48  | 56   | 65   |  |  |  |
|   |  |   |  |   |   |  |  |  |  |  |
|   | NPV@7.5%   | Units   | Lowest   | Lower   | Base  | Higher   | Highest  |  |  |  |
|   | Gold Price   | \$ millions   | 36   | 60  | 84  | 107  | 131  |  |  |  |
|   | Recovery   | \$ millions   | 75   | 79  | 84  | 88   | 93   |  |  |  |
|   | Head Grade   | \$ millions   | 38   | 61  | 84  | 106  | 129  |  |  |  |
|   | Operating Cost   | \$ millions   | 104  | 94  | 84  | 60   | 36   |  |  |  |
|   | Capital Cost   | \$ millions   | 90   | 87  | 84  | 77   | 70   |  |  |  |
| Social  | <ul> <li>GCM has been</li> </ul>   | in operation  | since 2010   |   |   |  |  |  |  |  |
|   | <ul> <li>GCM currently<br/>is working with<br/>de Antofagasta<br/>support in orde<br/>useful to the condeveloped and<br/>working with the</li> </ul> | Liceo Politect<br>a to develop<br>or to develop a<br>community and<br>implemented   | nico de Tal<br>and implen<br>apprentices<br>d applicable<br>I in 2012 ar | tal and the<br>nent educa<br>hip program<br>to mining<br>nd 2013. ( | Colegio ational promes. These g. A num GCM is c | Industrial I rograms and se program on the country of country of country of the c | Oon Bosco<br>nd student<br>is are both<br>irses were |  |  |  |
| Other   | risks and unce<br>or confidence<br>reserve estima  | The mine is a mature operation. In RPA's opinion, there are not any significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information, mineral resource or mineral reserve estimates, or projected economic outcomes.                          |  |   |   |  |  |  |  |  |
|   | <ul> <li>GCM's permits good standing.</li> </ul>   |   | n of the Gu  | anaco IVIIN   | e and Ar  | mancaya N  | line are in  |  |  |  |
| Classification  | Measured Re-<br>Resources are  |   |  |   |   | erves and  | Indicated  |  |  |  |
|   | and 3.64 g/t Ag<br>AuEq ounces t<br>and a result of  | and 3.64 g/t Ag with 47 koz of gold and 57 koz of silver. The conversion rate of AuEq ounces from resources to reserves is approximately 22%, which is low, and a result of using a lower cut-off grade for resources (1.5 g/t AuEq) versus reserves (2.0 g/t AuEq) and stope dilution resulting in stopes not making the |  |   |   |  |  |  |  |  |
|   | Ag with 206 kg<br>ounces from re   | <ul> <li>The Ore Reserves for Amancaya are 948 kt containing 6.77 g/t Au and 63.15 g/t<br/>Ag with 206 koz of gold and 1,925 koz of silver. The conversion rate of AuEq<br/>ounces from resources to reserves is approximately 84% reflecting the high-<br/>grade nature of the deposit.</li> </ul>                       |  |   |   |  |  |  |  |  |
| Audits or reviews                                     | <ul> <li>RPA has revie<br/>project and has</li> </ul>  |   |  | •   | of its tec                                      | hnical revi  | ew of the  |  |  |  |
| Discussion of<br>Relative<br>Accuracy /<br>Confidence | reasonably be information, m   |   |  |   |   |  |  |  |  |  |