

ASX Announcement | 17 September 2025

EXCEPTIONAL GOLD RECOVERIES ACHIEVED ON OXIDE MATERIAL AT 1Moz+ PANTANILLO GOLD PROJECT, CHILE

A review of column leach testwork shows high and rapid gold recovery for oxide mineralisation, achieving +80% after 30 days

Flagship Minerals Limited (ASX:FLG) (“Flagship” or “the Company”) has completed a review of metallurgical testwork conducted by previous explorers on the Pantanillo deposit within its Pantanillo Gold Project hosting 47.4Mt @ 0.69g/t Au for 1.05Moz Au foreign estimate (QFE^{1,2}, NI 43-101), located in the Maricunga Gold Belt in northern Chile.

KEY POINTS


- Flagship **completes review of previous metallurgical testwork** on the Pantanillo deposit.
- Column leach testwork shows **high and rapid gold recovery** for oxide mineralisation, with **gold recoveries for oxides of >80% after 30 days**.
- Results highly encouraging, **peer group oxide Au recoveries typically 50% - 75%**.
- The column leach testwork **results derisk next phase of leaching testwork**.
- Next phase of testwork will focus on coarser crush and dump leach particle size, which will guide pilot testwork.
- Nearby Fenix deposit currently under construction, with ore reserve grade of 0.48g/t Au, expects 75% recovery from dump leaching.
- **Successful dump leach testwork** on Pantanillo mineralisation can **position Flagship for significant Capex/Opex savings**.
- Review completes another step in fast-tracking conversion of **current 1.05Moz Au QFE** to a Mineral Resource Estimate in accordance with the JORC Code 2012.

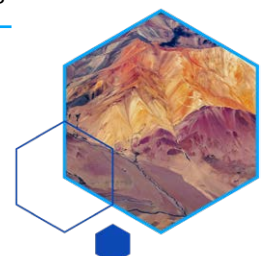
¹ The qualifying foreign estimates (QFE) are not reported in accordance with the JORC Code (2012). The Competent Person has not done sufficient work to classify the qualifying foreign estimates in accordance with the JORC Code (2012) and it is uncertain that following evaluation and/or further exploration work that the foreign estimates will be able to be reported as Mineral Resources or Ore Reserves in accordance with the JORC Code. The QFE was first reported in ASX announcement dated 14 April 2025 and titled “*Pantanillo Gold Project - Advanced Large Scale Oxide Gold Project - Maricunga Gold Belt, Chile - Binding Option Agreement to Purchase 100%*”.

² The Company is not in possession of any new information or data relating to the QFE that materially impacts on the reliability of the QFE or Flagship's ability to verify the QFE as Mineral Resources or Ore Reserves in accordance with Appendix 5 (JORC Code). Flagship also confirms that the supporting information provided in the initial market announcement in accordance with Listing Rule 5.12 continues to apply and has not materially changed.

Flagship Minerals Limited

77 Robinson Road #06-00, Robinson 77, Singapore 068896
Level M, 388 George Street, Sydney, NSW, 2000

ASX:  flagshipminerals.com



Flagship Minerals' Managing Director, Paul Lock, commented:

“Flagship’s review of column leach testwork results prove highly positive, confirming high gold recoveries are achievable through cyanidation of crushed material, including ~80% gold recoveries from bottle roll testwork of oxide material and +80% recoveries from column leach testwork on an oxide composite after 30 days of leaching.

“These results materially derisk the next phase of leaching testwork. Flagship will now move on to confirmatory heap leach testwork for input into future financial modelling. This will also guide ongoing optimisation in the lead up to pilot testwork.

“Flagship’s strategy is to define sufficient Mineral Resources that will support considerations for project development consisting of open pit mining and heap leach processing with an aim to produce 100,000oz of gold per year for more than 10 years.

“The leaching testwork results further confirm Pantanillo’s credentials as a large, scalable heap leach opportunity with substantial strike and down dip extension potential.

“This review completes another step in fast-tracking conversion of current 1.05Moz Au QFE to a Mineral Resource Estimate in accordance with the JORC Code 2012.”

Commentary and Results

Metallurgical test work is a core component of the Company’s work plan to advance the Pantanillo project towards production. In preparation for additional testwork programs Flagship is reviewing metallurgical testwork conducted by previous explorers.

A review of this work confirms that high gold recoveries were achieved through cyanidation of crushed material. This includes gold recovery of 79.8% from bottle roll testwork of oxide material at particle size of 80% -1.7mm, and 82.7% from column leach testwork at particle size 80% -25mm on oxide composite after 75 days of leaching. Column leach gold recoveries from mixed and sulphide mineralisation were 53.3% and 26.7% respectively. Gold recoveries from the bottle roll tests for mixed and sulphide mineralisation are 57.8% and 52.8% respectively after 120 hours. This demonstrates that finer particle sizes will likely yield higher gold recoveries for the mixed and sulphide material.

Appendix 1 provides more detail on the results of this testwork. These data are sourced from NI 43-101 reports lodged by previous operators as well as unpublished information contained in the recently acquired Anglo American dataset for the project, see Appendix 1 for relevant References, Appendix 3 JORC Code Table 1, and Flagship’s ASX release dated 27 August, 2025, and titled “Pantanillo Gold Project - Anglo Exploration Dataset Secured”.

The metallurgical samples were derived from drillhole PNN-11-50DDH (see Figure 1). The hole is diamond core with a diameter of 61.1mm (HQ3) and was drilled by Orosur Mining in May 2011. A total of 46 samples were collected from this hole and delivered to McLelland Laboratories. The total amount of sample is estimated to be 600kg, which was split into 3 x ~200kg composite samples labelled oxide, mixed and sulphide. The testwork samples were sourced from these composite samples.

The drillhole and sample locations are shown in Figure 1.

The metallurgical testwork indicates that gold is cyanide soluble, particularly in the oxide zone, and is assumed to be recoverable under heap leach conditions. For the bottle roll testwork at a particle size of 80% <1.7mm, gold recoveries of 79.8% were achieved. In column leach testwork at a particle size of 100% <38mm, gold recoveries of >80% were achieved. The column leach testwork results derisk and facilitate Flagship's next phase of leaching testwork. The testwork results for Pantanillo are very encouraging when considered in the context of the results achieved by Rio2 for its Fenix project ~40km to the north.

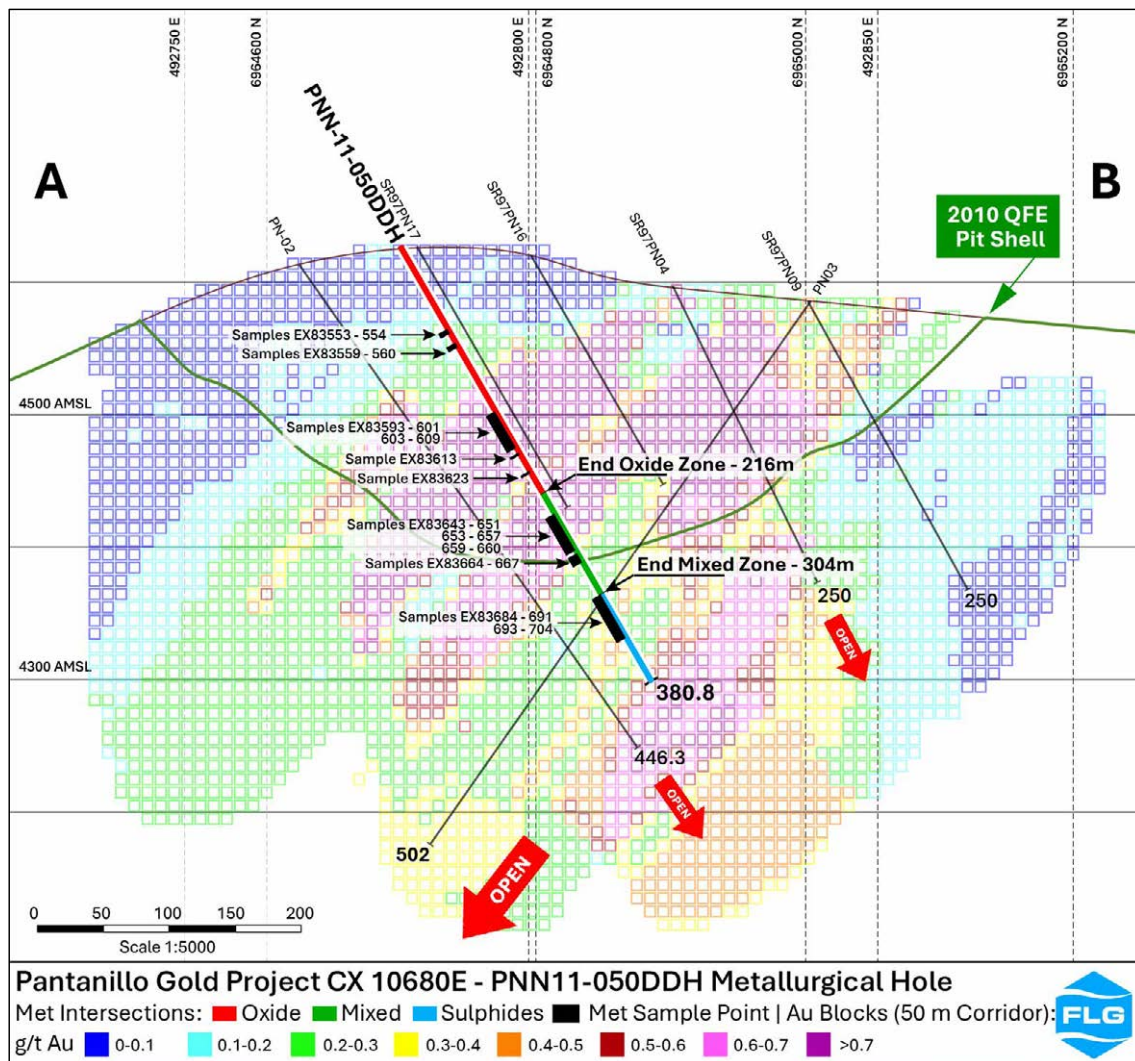


Figure 1: Metallurgical hole PNN-11-50DDH on cross section 10680E and QFE block model

Flagship will conduct confirmatory heap leach testwork for input into future financial modelling and to guide ongoing optimisation testwork. The program will partly focus on particle size v Au recovery v time and will assess the potential of 'dump leaching'. In a heap leach operation dump leaching refers to the leaching of blasted Run

of Mine 'ore' delivered to the leach pad. As this is delivered directly from the mine there is no need for crushing, screening, stockpiling, conveying, agglomeration and rehandling for heap stacking, and hence pre-production capital expenditure (Capex), sustaining capital expenditure and operating costs (Opex) will be materially reduced. However, dump leaching is likely to recover less gold compared to crushing and leaching the same material, hence the focus on particle size v Au recovery v time.

The test work will provide Flagship the necessary information to conduct trade off studies, where the present value of higher gold recoveries through crush and leach are compared to the present value of capital and operating cost savings gained through dump leach. Aside from decreasing Capex and Opex, dump leach also simplifies the operations, which reduces operational risk.

Heap leaching inclusive of dump leaching is a global practice, with 46% of gold production derived from heap leaching³. In the Maricunga Gold Belt (MGB), Rio2 (TSXV: RIO) is currently constructing the Fenix dump leach gold project located about 40km NW of Pantanillo. Fenix is slated to produce approximately 82,000oz Au pa for 17 years, averaging ~91.5koz in years 1-12. The ROM grade over the mine life is a planned average 0.48g/t Au and AISC are stated to be \$1237/oz⁴.

Rio2 and previous owners conducted numerous heap leach focused testwork campaigns on the Fenix deposit. Like Pantanillo, the tests showed rapid and relatively high gold recoveries at fine to moderate particle sizes. However, Rio2 is adopting the dump leach process that does not include crushing, instead leaching blasted ROM 'ore' at a particle size of 100% -150mm, delivered to the heap directly from the mine. Rio2 expects gold recovery to be 75% over the life of mine at a head grade of 0.48g/t Au. The recovery curves from the Fenix testwork at a -19mm crush, Pantanillo-25mm crush and Fenix dump leach material is shown in Figure 2. This demonstrates slower gold recoveries of the Fenix dump leach material but with ultimate gold recoveries of 75% against approximately 82% average gold recovery at -19mm crush size, a difference of 7%.

³ Sorting through the Heap, Canadian Mining Journal, 1 September 2020, available at: <https://www.canadianminingjournal.com/featured-article/sorting-through-the-heap/>

⁴ For details on Rio2's Fenix Gold Project, see: <https://www.rio2.com/post/rio2-completes-feasibility-study-for-the-fenix-gold-project>.

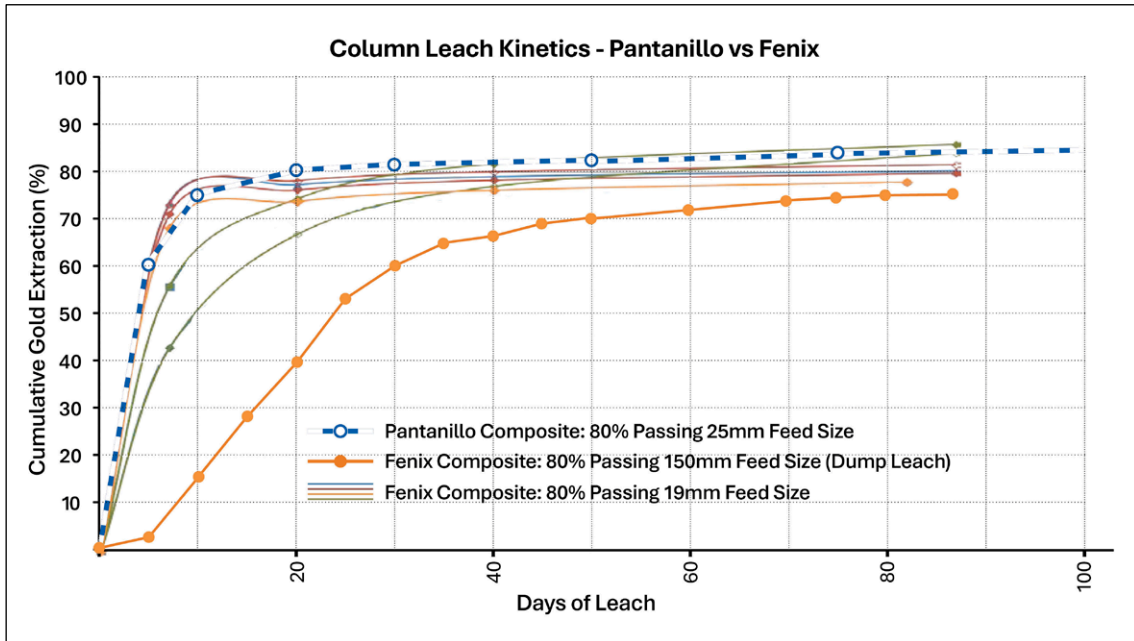


Figure 2: Leach Kinetics - Au recovery v time for Pantanillo and Fenix crushed samples versus Fenix 'dump leach' material.

Figure 3 expands on the relationship between particle size and gold recovery for the material tested from the Fenix deposit.

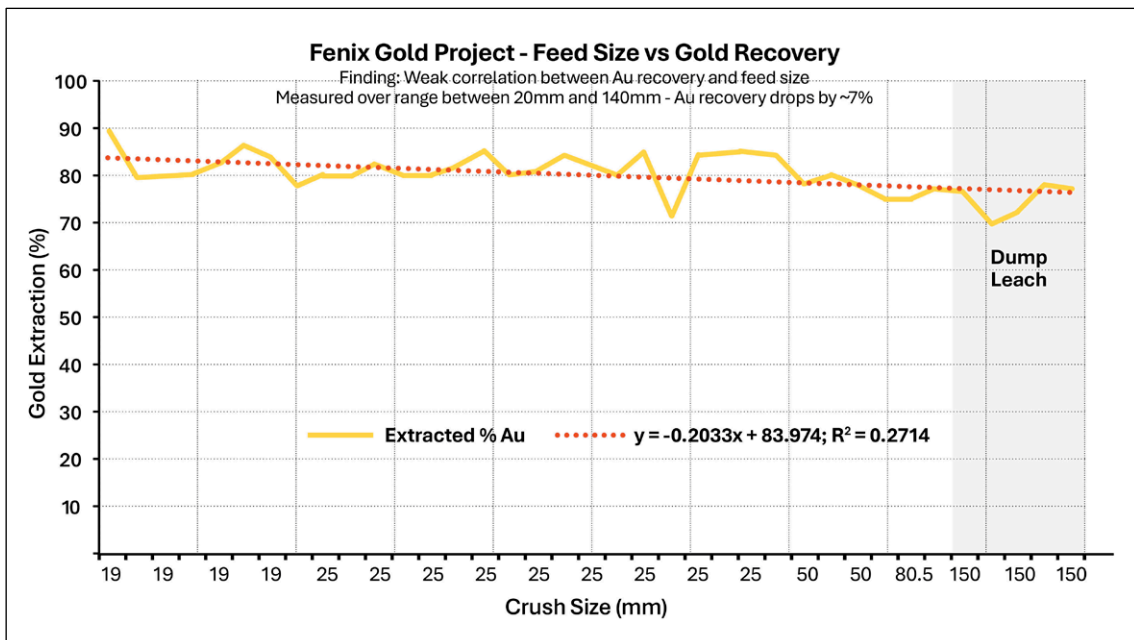


Figure 3: Fenix Testwork - Feed size vs Au recovery

As a result of the metallurgical review, Flagship is of the opinion that the data for the Fenix and Pantanillo leach testwork conducted on crushed material show similar leach kinetics i.e. recovery v time. This similarity may also translate to the potential for dump leaching of the Pantanillo oxide mineralisation and may open up a pathway for an even lower Capex and Opex start-up.

Strategy and Work Plan

Flagship's strategy for the Pantanillo project is to define sufficient Mineral Resources that will support considerations for project development consisting of open pit mining and heap leach processing with an aim to produce 100,000oz of gold per year for more than 10 years.

Nearby projects, such as the Fenix Gold Project owned by Rio2 where construction is around 40% complete, provide useful benchmarks. Fenix is an oxide gold project slated to produce 1.32 Million ounces of gold over a 17 year mine life, it has a 0.48g/t head grade and an average life of mine AISC of US\$1,237/oz Au⁵.

Flagship's work plan for the Pantanillo Gold Project will focus on the following:

- Conducting the necessary work to convert and increase the existing qualifying foreign estimate to Mineral Resources reported in accordance with the JORC Code (2012). This will include validation of the existing drillhole data, confirmatory, infill and extensional drilling as required, as well as other supportive work.
- Additional metallurgical testwork and other project studies for input into techno-economic evaluation.

The Pantanillo deposit has significant additional exploration potential for both oxide and higher-grade sulphide mineralisation. Oxide potential exists along strike and in areas proximal to the existing deposit.

Further potential for additional mineralisation also exists below post mineralisation cover to the southeast of Pantanillo. Outside of the Pantanillo deposit, exploration potential remains in the Pantanillo Central, Quebrada Pantanillo and Oro 52 prospects. Although the alunite alteration is typically associated with advanced argillic alteration caps that commonly overly gold-bearing porphyry-type deposits like Pantanillo and other gold deposits in the region, limited drilling has been conducted at some of these targets.

Exploration potential throughout the broader project area of over 110km² will also be assessed. The occurrence of magnetite and pyrite in the fresh mineralisation provides a good co-incident geophysical target utilising magnetics and Induced Polarisation.

- Ends -

⁵ For details on Rio2's Fenix Gold Project, see: <https://www.rio2.com/post/rio2-completes-feasibility-study-for-the-fenix-gold-project>.

Authorised by the Chairman and Managing Director

For further information please contact:

Paul Lock

Managing Director
ceo@flagshipminerals.com

Phone: +61 2 7228 7994

Elissa Hansen

Company Secretary
cosec@flagshipminerals.com

For media or investor-related inquiries:

Robert Williams

Financial & Corporate Relations (FCR):
r.williams@fcr.com.au +61 (0) 477 666 255

IMPORTANT INFORMATION

Competent Persons Statement - General

The information in this report that relates to Exploration Targets and Exploration Results, is based on information compiled by Mr. David Hobby, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr. Hobby is a fulltime employee, Director and Shareholder of Flagship Minerals Limited. Mr. Hobby has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr. Hobby consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

Various statements in this document constitute statements relating to intentions, future acts and events which are generally classified as “forward looking statements”. These forward looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other important factors (many of which are beyond the Company’s control) that could cause those future acts, events and circumstances to differ materially from what is presented or implicitly portrayed in this document. For example, future reserves or resources or exploration targets described in this document may be based, in part, on market prices that may vary significantly from current levels. These variations may materially affect the timing or feasibility of particular developments. Words such as “anticipates”, “expects”, “intends”, “plans”, “believes”, “seeks”, “estimates”, “potential” and similar expressions are intended to identify forward-looking statements. Flagship Minerals Limited cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Flagship Minerals Limited only as of the date of this document. The forward-looking statements made in this document relate only to events as of the date on which the statements are made. Except as required by applicable regulations or by law, Flagship Minerals Limited does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

Important

To the extent permitted by law, Flagship Minerals Limited and its officers, employees, related bodies corporate and agents (Agents) disclaim all liability, direct, indirect or consequential (and whether or not arising out of the negligence, default or lack of care of Flagship Minerals Limited and/or any of its Agents) for any loss or damage suffered by a Recipient or other persons arising out of, or in connection with, any use or reliance on this document or information.

Appendix 1 – Drillhole PNN-11-50DDH testwork for Pantanillo

In 2011 Orosur conducted testwork at McClelland Laboratories including bottle roll tests and column leach testwork. McClelland crushed a total of 46 samples to 100% -38 mm and prepared three composites (Oxide, Mixed & Sulphide). Sub-samples of the three composite samples were then crushed to a particle size of 80% – 1.7mm for bottle roll testwork.

The results of the bottle roll testwork are shown in Figure 13-2. The Oxide, Mixed and Sulphide composites could generally be classed as moderately leachable. Good recoveries were obtained in 120 hours with these composites. Oxide yielded 78.9% Au recovery, mixed yielded 58.8% recovery with sulphide at 52.8% recovery. The recovery speed was relatively rapid with gold extraction almost complete after 48 hours in all samples. For the Mixed and Sulphide composites, typically gold recovery was lower and slower compared to the more rapid and higher recovery for the Oxide sample.

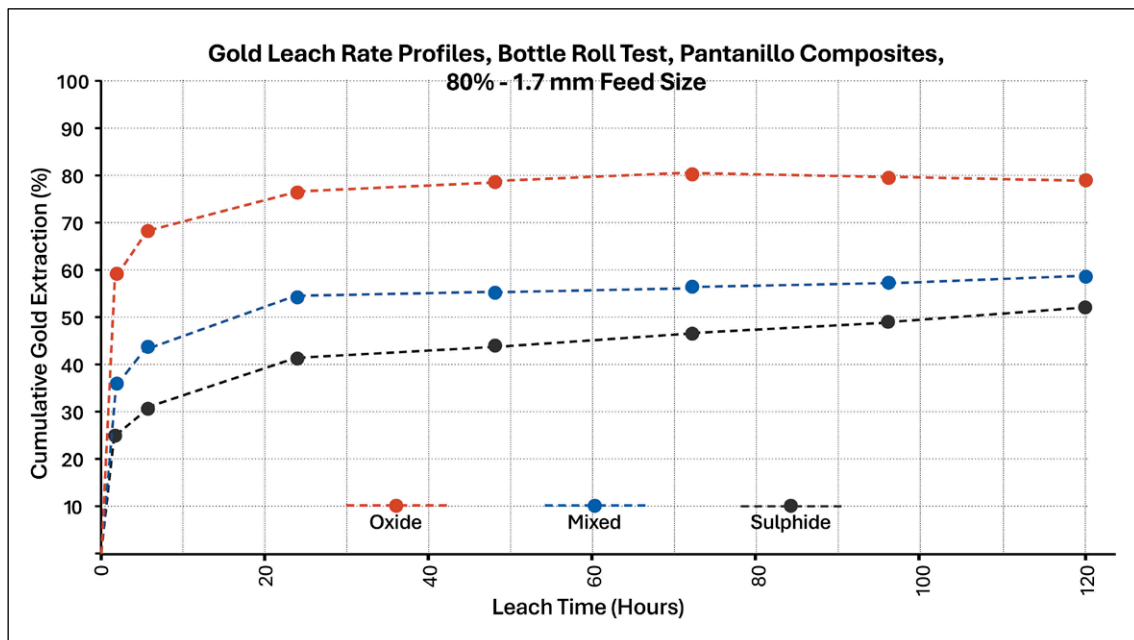


Figure 13-2: Gold Leach Rate Profiles, Bottle Roll Test, Pantanillo Composites, 80% - 1.7mm Feed Size (Source: McClelland, Nov. 2010)

For the same composites (Oxide, Mixed and Sulphide) a testwork program of column leaching was also completed. This testwork used the material crushed to 80% -25 mm (100% -38 mm) and the objective was to determine the gold recovery rates and reagent consumptions by simulating heap leach conditions.

The columns used were 0.20 m in diameter and were filled to a height of approximately 2.63 m, with a sample load of approximately 125 kg. A standard procedure was followed without agglomeration but with lime addition to the dry feed prior to loading in the columns (at the rate of 2.8 to 3.9 kg/t of feed). The leach solution addition rate was 12 L/h/m³ (0.20 L/min/m³).

The test results show that the oxide composite can be leached using cyanide at the feed size selected, resulting in gold recoveries of 80% after 25 days and 83.5% after 188 days.

For the mixed material under the same conditions after 158 days the gold recovery was 53.3% and for the sulphide material under the same conditions after 146 days the gold recovery was 26.7%.

The gold recovery rate was fairly rapid and the gold recovery was almost complete after 30 days, indicating longer leach times did not appreciably improve gold recovery. The cyanide consumptions were moderate at 1.01 to 1.34 kg NaCN/t feed and copper was assumed to be the main cyanide consumer.

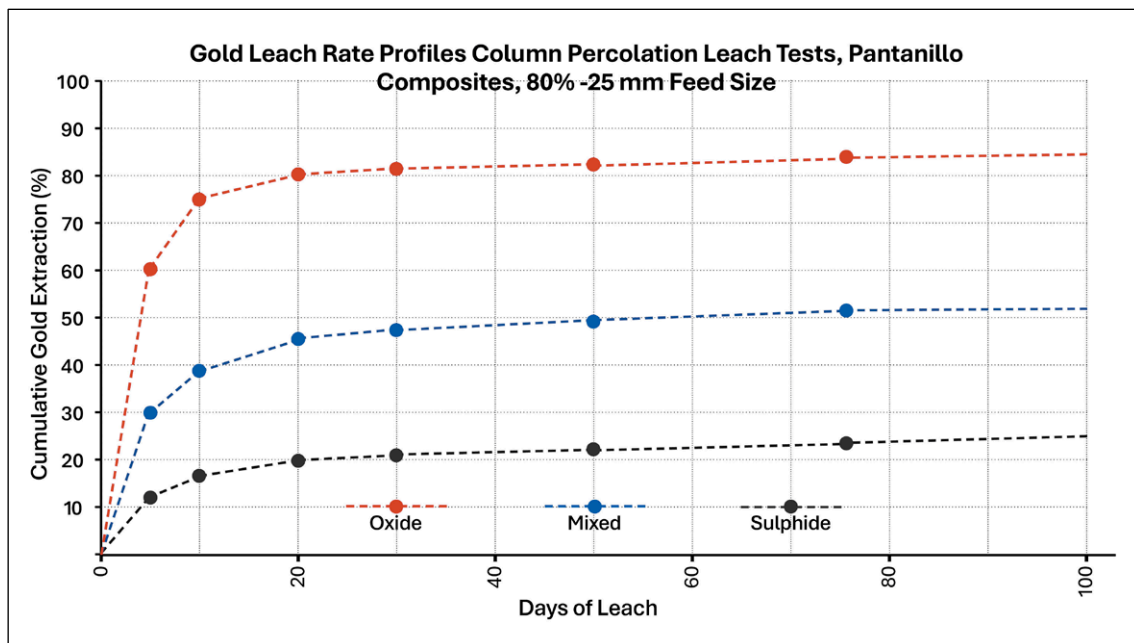


Figure 13-3: Gold Leach Rate Profiles Column Percolation Leach Tests, Pantanillo Composites, 80% - 25mm Feed Size (Source: McClelland, Nov. 2010, modified by Flagship Minerals)

References

https://www.sedarplus.ca/csfsprod/data102/filings/01503016/00000001/h%3A%5CD_Sedar%5CFortune%5CUruguay%5CPantanilloFINAL.pdf November 23, 2009

<https://www.sedarplus.ca/csfsprod/data111/filings/01631911/00000002/v%3A%5COrosurMining-Uruguay%5CPressReleases%5COMI-PR-Pan43-101-Oct15-2010.pdf>

<https://www.sedarplus.ca/csfsprod/data131/filings/01919058/00000002/v%3A%5COrosurMining-Uruguay%5CPressReleases%5COMI-NI43101-Jun5-2012.pdf>

Appendix 2 - ASX Listing Rule Chapter 5. Clauses 5.10 to 5.12.10 and 5.22 (b) and (c)

The estimates of Mineral Resources for the Pantanillo Norte deposit are considered qualifying foreign estimates under relevant ASX Listing Rules. The qualifying foreign estimates were reported in accordance with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards and the National Instrument 43-101 (NI 43-101) by Orosur Mining Inc. (TSXV:OMI) on October 15, 2010 and filed on SEDAR. The qualifying foreign estimates were re-stated by Orosur in a NI 43-101 Technical report in support of a Preliminary Economic Assessment on October 15, 2012.

The categories of Mineral Resource classification used under the NI 43-101 and CIM Standards are 'qualifying foreign estimates' in accordance with Chapter 19, ASX Listing Rules and as per Chapter 5, ASX Listing Rule 5.12.2, have the same categories of Mineral Resource classification as the JORC Code (2012) (Appendix 5A, ASX Listing Rules), which are Measured, Indicated and Inferred categories.

Flagship deems these estimates to be both material and relevant given that Pantanillo demonstrates potential to be a material mining project to Flagship.

In accordance with CIM and NI 43-101 Standards, Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the Mineral Resources will be converted to Ore Reserves. Additional drilling and associated work will be required to verify geology and mineralisation.

The procedures used in the preparation of the qualifying foreign estimates are considered to be reliable. The NI 43-101 and CIM (2010) Standards have very similar reporting criteria to those required in Sections 1, 2 and 3 of the JORC Code 2012 Table 1.

Key criteria, as defined in Table 1 of the JORC Code (2012) has been reviewed by Flagship.

The qualifying foreign estimate has been prepared and reviewed by persons defined as qualified persons as defined in the Canadian NI 43-101 standard. The qualified persons confirm that the estimates have been prepared in accordance with Canadian NI 43-101.

Modern exploration commenced in 1983 and has been conducted by Anglo American, Kinross Gold Corp. (Kinross), and Orosur. Work completed in the period to 2011 has included geological mapping, soil and rock geochemical surveys, trenching, reverse circulation (RC) and diamond core drilling, metallurgical testwork leading to Mineral Resource estimation.

From 1988 to 2010, approximately 20,531m in 78 holes were drilled on the property. These holes were used for the resource estimation. Programs were completed by Anglo American, Kinross and Orosur. Of these, 37 holes (10,909 m) were core holes, 48 holes (10,471 m) were RC, and one hole (700 m) was pre-collared using RC drilling, then drilled to final depth with diamond drilling (see Table 1)

Table 1. Drilling used in the foreign estimate of mineralisation.

| Company | Year | Total Holes | Total (m) | Hole Type |
|----------------|---------|-------------|---------------|-----------|
| Anglo American | 1988 | 5 | 1,138 | DD |
| EMMB* | 1997-98 | 22 | 4,825 | RC |
| Kinross | 2006-08 | 12 | 5,955 | DD |
| Kinross | 2006 | 9 | 2,974 | RC |
| Orosur | 2010 | 19 | 3,785 | DD |
| Orosur | 2010 | 11 | 1,854 | RC |
| Total | | 78 | 20,531 | |

Assumptions including mining and processing parameters are provided in the referenced NI 43-101 report. These are summarised below.

Mineral resources (see Table 2) are reported within a Lerchs-Grossman (LG)-optimized pit shell using Whittle® software with the following assumptions: a gold price of US\$ 1,035/oz; mining cost of US\$ 1.65/t; processing cost of US\$ 4.00/t; general and administration cost of US\$ 1.00 US/t. Based upon historical testwork, gold recoveries of 75% for oxide material, 65% for mixed (oxide/sulphide) material, and 50% for sulphide material.

Table 2. Foreign estimate of mineralisation

| Type | Measured ⁶ (Mt) | Au (g/t) | Indicated ³ (Mt) | Au (g/t) | Inferred ³ (Mt) | Au (g/t) | Total (Mt) | Au (g/t) | Au (koz) |
|--------------|-------------------------------|-------------|--------------------------------|-------------|-------------------------------|-------------|---------------|-------------|----------------|
| Oxide | 19.81 | 0.72 | 1.75 | 0.55 | 0.10 | 0.39 | 21.66 | 0.70 | 487.5 |
| Mixed | 16.01 | 0.70 | 8.34 | 0.65 | 0.20 | 0.62 | 24.55 | 0.68 | 536.7 |
| Sulphide | 0.75 | 0.72 | 0.44 | 0.68 | 0 | 0 | 1.19 | 0.69 | 26.4 |
| Total | 36.57 | 0.71 | 10.53 | 0.64 | 0.30 | 0.53 | 47.40 | 0.69 | 1,050.6 |

Mining of the mineralised material is proposed by standard open pit mining methods of drill and blast, excavate, load and haul with final pit wall slopes averaging 45 degrees. The assumed model for development anticipates

⁶ These terms are used in the qualifying foreign estimate of mineralisation and are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) standards and the National Instrument 43-101 (NI 43-101) by Orosur Mining Inc. (TSXV:OMI) on October 15, 2010, which are discussed further in Appendix 4, with specific reference to relevant sections of ASX Listing Rules Chapter 5.

heap leach circuit recovery for all materials mined. Approximately 98% of the material mined and treated is classified as oxide (46%) or mixed (52%). The balance being sulphides.

The proposed plant would use conventional, tested technology and consist of the following unit operations: – Primary crushing to product size at P80 -25 mm, Transport by conveyor to secondary crushing, Transport by conveyor to load out bin and reagent addition (lime), Transport and heap loading with trucks, Heap leaching with cyanide/solution recovery, Adsorption, desorption and recovery (ADR) and electrowinning (EW) plant.

Other assumptions made include: approvals of necessary permitting and environmental requirements will proceed without concern, water rights are sufficient for the operation. Locations for dumps, leach pads, processing and associated infrastructure are assumed base upon site topography and pit location.

Average density values for each mineralization unit were estimated from the density database provided by Orosur. Some determinations were excluded from the calculations due to apparent inconsistencies (anomalously low values, confusing classification, etc.).

Gold was estimated by using ordinary kriging (OK) estimation within modelled domains based on assay results and geological model. The grade estimation was completed in three passes. Hard contacts were assumed, so that samples were not shared across boundaries. Variograms defined a single-search orientation for all domains of the mineralized body, striking approximately 125° azimuth and dipping 60° southwest. The block model consists of regular blocks (10 m x 10 m x 10 m) and is rotated at 11.12 degrees azimuth. Gold grade inside and outside the 0.3 g/t Au grade shell were selected according to their position with respect to the grade-shell, lithology and mineralization units. The lithological, mineralization and grade-shell solids provided the support for the estimation domains. The three-dimensional block model was coded for lithology, mineralization and grade shell using the solids for each. Higher grades were given more restricted interpolation parameters to avoid grade smearing and potential overestimation.

Classification of Measured, Indicated and Inferred Mineral Resource to CIM definition standards is based on estimation passes within drill spacing parameters (see Table 3)

Table 3. Classification for foreign estimate of mineralisation

| Category | No. of drillholes | Distance to closest sample (m) | Average weighted distance (m) |
|-----------|-------------------|--------------------------------|-------------------------------|
| Measured | At least two | 0-50 | 0-75 |
| Indicated | At least two | 50-100 | 75 to 100 |
| Inferred | No restriction | No restriction | No restriction |

There are no more recent estimates of the mineralisation for the Project.

In accordance with Chapter 5, ASX Listing Rule 5.12.7, key activities proposed to ensure the qualifying foreign estimate complies with the JORC Code (2012 Edition) will include: Detailed verification and validation of information contained in the NI 43-101 report, particularly information relating to the drillhole database including sampling and assaying QA/QC, verification re-sampling and assaying of available ½ drill-core and sample pulps, verification of location/survey data, improving the geological model relevant to the mineralisation, verification of

density measurements applied to the different styles of mineralisation as well modelling of the oxide, mixed and fresh rock components of the mineralisation

The completion of additional diamond core drilling will be required to assist in validating the historical drill data that will be applied to a new Mineral Resource estimate. The application of updated modifying factors, such as metallurgical testwork on new drill core will assist in determining cut-off parameters. Pit optimisations may also be conducted on the new Mineral Resource leading to further technical studies to potentially define Ore Reserves. Assessments of environmental factors relevant to the project are also planned.

In accordance with Chapter 5, ASX Listing Rule 5.12.8, the work outlined above is anticipated to take approximately 2 years to complete. To fund the initial phase of this work Flagship is in discussions with relevant parties to complete an equity placement in April. Subject to commercial terms the Company intends to raise \$3 million.

Competent Person Statement

The Exploration Results and information in this announcement reported under Listing Rule 5.12 that relates to foreign estimates of mineralisation at the Pantanillos Project is based on and fairly represents information compiled by Mr David Hobby, and is an accurate representation of the available data and studies for the Project. Mr Hobby is a Member of the Australasian Institute of Mining and Metallurgy and is an employee and Executive Director of Flagship Minerals Limited. Mr Hobby has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results and Mineral Resources, and Ore Reserves. Mr Hobby consents to the inclusion in the announcement of the matters based on the information in the form and context in which it appears.

References

https://www.sedarplus.ca/csfsprod/data102/filings/01503016/00000001/h%3A%5CD_Sedar%5CFortune%5CUruguay%5CPantanilloFINAL.pdf *November 23, 2009*

<https://www.sedarplus.ca/csfsprod/data111/filings/01631911/00000002/v%3A%5COrosurMining-Uruguay%5CPressReleases%5COMI-PR-Pan43-101-Oct15-2010.pdf>

<https://www.sedarplus.ca/csfsprod/data131/filings/01919058/00000002/v%3A%5COrosurMining-Uruguay%5CPressReleases%5COMI-NI43101-Jun5-2012.pdf>

Appendix 3 - JORC Code, 2012 Edition – Table 1 Pantanillo AMEC QFE 2010

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

| Criteria | JORC Code explanation | Commentary |
|-----------------------|---|---|
| Sampling techniques | <ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. 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. | <ul style="list-style-type: none"> Orosur drilling: 2m full core DD samples. Samples assayed by 50g fire assay plus Cu and multielements by ICPAES. |
| Drilling techniques | <ul style="list-style-type: none"> 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). | <ul style="list-style-type: none"> The met hole was drilled as HQ3 diamond core, diameter of 61.1mm. |
| Drill sample recovery | <ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. | <ul style="list-style-type: none"> Orosur core recoveries from HQ3 stated as 93% average. |
| Logging | <ul style="list-style-type: none"> 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 | <ul style="list-style-type: none"> The quantity and quality of lithological and geotechnical data collected by Orosur personnel are sufficient to support Mineral Resource estimation in the opinion of the QPs. |

| Criteria | JORC Code explanation | Commentary |
|--|--|---|
| | <p><i>studies.</i></p> <ul style="list-style-type: none"> • <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> • <i>The total length and percentage of the relevant intersections logged.</i> | <ul style="list-style-type: none"> • Most core was photographed and 100% of all intersections were logged. QP did not identify logging as an issue. |
| <p><i>Sub-sampling techniques and sample preparation</i></p> | <ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> | <ul style="list-style-type: none"> • Orosur core samples were crushed to 100% <38mm with this sample split in half. Sub samples were selected then crushed to 805 - 1.7mm for bottle roll testwork, and pulverized to 85% <0.075mm for analytical purposes. • For Orosur drilling field duplicates were inserted at 2.8% ratio. • In all cases sample sizes are considered appropriate |
| <p><i>Quality of assay data and laboratory tests</i></p> | <ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i> | <ul style="list-style-type: none"> • Orosur samples assayed by McLelland with 50g fire assay for gold with AAS finish plus ICP for copper and 33 other elements with 4-acid digestion. These methods considered total extraction for metals of interest. The QA/QC procedures for the McLelland analysis are not stated. • |
| <p><i>Verification of sampling and assaying</i></p> | <ul style="list-style-type: none"> • <i>The verification of significant intersections by either independent or alternative company personnel.</i> • <i>The use of twinned holes.</i> • <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i> • <i>Discuss any adjustment to assay data.</i> | <ul style="list-style-type: none"> • Hard copy lab assay reports for gold against the assay 'database' provided by Orosur were checked with no material issues found. • Hole PNN-11-50DDH is essentially a twin of RC hole SR97PN-17. A comparison between the holes generally shows broad agreement where intersection zones can be directly compared. • Flagship has acquired Microsoft Excel® files with survey, assay and lithology and other data corresponding to Anglo American, Kinross and Orosur drilling campaigns. |

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| Location of data points | <ul style="list-style-type: none"> • 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. • Specification of the grid system used. • Quality and adequacy of topographic control. | <ul style="list-style-type: none"> • Collar surveys were performed for the Kinross and Orosur drill programs by registered surveyors using differential GPS equipment. No information is available on the collar survey methods for the Anglo American drilling. Down-hole survey methods included a gyroscope/accelerometer (Kinross programs) and Reflex down-hole dip and magnetic azimuth survey equipment (Orosur program). • All the project coordinates were subsequently transformed into the WGS-84 19S system from PSAD 56. • AMEC received a digital topography from Orosur as 5 m- and 10 m-spaced contour lines that were the product of photo-interpretation. AMEC imported the contour lines into GEMS® and compared the surveyed drill-hole collar elevations against the topographic surface, and found that significant differences did occur for all drill holes. with 60% of the differences above 10 m. AMEC updated portions of the topographic surface using surveyed drill-hole collar elevations as a preliminary fix; however, AMEC recommends that a new digital topographic surface be generated to correct any problems and enable an accurate topographic clip to the block model. |
| Data spacing and distribution | <ul style="list-style-type: none"> • Data spacing for reporting of Exploration Results. • 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. • Whether sample compositing has been applied. | <ul style="list-style-type: none"> • The drilling grid was approximately 50 m spaced sections with 50m-100m hole spacing. AMEC considered this adequate for the “resources” reported. • The nominal sample length for assays was 2 m, corresponding to 82.6% of total samples; 17.0% of the samples are less than 2 m long, and only 0.4% of the samples are longer than 2 m. For estimation purposes, the original assayed interval length was used to honour the grade-shell contacts and variability observed in the deposit. |
| Orientation of data in relation to geological structure | <ul style="list-style-type: none"> • Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • If the relationship between the drilling orientation and the orientation of key mineralised structures | <ul style="list-style-type: none"> • Drill orientations are generally appropriate for the mineralisation style, and have been drilled at orientations that are optimal/near optimal for the orientation of mineralisation for the bulk of the deposit area. • Some holes were drilled in the opposite direction |

| Criteria | JORC Code explanation | Commentary |
|-------------------|---|---|
| | <i>is considered to have introduced a sampling bias, this should be assessed and reported if material.</i> | and are sub-parallel to the key mineralised structures. However, grades in these holes are not materially different to other holes drilled orthogonal to mineralisation on that cross section mor the block model grades.. |
| Sample security | <ul style="list-style-type: none"> The measures taken to ensure sample security. | <ul style="list-style-type: none"> AMEC state, sample security appears to be appropriate for gold–copper porphyry deposits for the Anglo American and Kinross drill programs, and are appropriate for the 2010 Orosur drill program for the purposes of Mineral Resource estimation on the Pantanillo Norte deposit. |
| Audits or reviews | <ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. | <ul style="list-style-type: none"> Independent data audits have been conducted, and indicate that the sample collection and database entry procedures are acceptable |

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

| Criteria | JORC Code explanation | Commentary |
|---|--|---|
| Mineral tenement and land tenure status | <ul style="list-style-type: none"> 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. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. | <ul style="list-style-type: none"> The Pantanillo Project comprises 3 exploitation concessions corresponding to an area of 11,000 hectares the ("Mining Rights"). These Mining Rights are exclusively held by Compañía Minera Atahualpa SpA ("CMA"). The Concessions are GUILLERMO ANTONIO 1 AL 400, GABRIELA 1 AL 1000 and CECILIA 1 AL 950. Flagship has a 5-year Option agreement to acquire a 100% interest in the project or a total consideration of \$US 12.6 Million. The tenure is secure as long as annual fees and rents are paid to the Government. Project development will require submission of a full Environmental Impact Statement (EIS). The Project is situated in an area of environmental significance and is adjacent the Nevado Tres Cruces National Park. Certain sectors are classed as Ramsar sites. An application to modify the Ramsar site boundaries was made in 2009. Consequently, any Project development activities will require consideration of endemic flora and fauna, wetlands, Astaburuaga River, the proximity of the Project to Nevado Tres Cruces |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| <p>Exploration done by other parties</p> | <ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. | <p>National Park, its biological corridor and proposed buffer extensions.</p> <ul style="list-style-type: none"> In the early 1980s, Anaconda conducted initial exploration activities on the project; however, no details were available on these programs. Modern exploration has been conducted by Anglo American, Kinross, and Orosur Mining Inc. Work completed in the period 1983 to 2011 has included geological mapping, soil and rock geochemical surveys, trenching, Quickbird topography, reverse circulation (RC) and core drilling, ground magnetics, Mineral Resource estimation, metallurgical testwork and project studies . In the opinion of the AMEC QPs, the exploration programs completed to date are appropriate to the style of mineralisation within the project. The Pantanillo deposit may have additional exploration potential for sulphide mineralization down-dip to the southwest, and below the ignimbritic cover in the southeast. Other prospects in the project area also need follow-up. Much of this data has not been seen by Flagship. |
| <p>Geology</p> | <ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. | <ul style="list-style-type: none"> The Maricunga belt represents a 200 km long by 50 km wide metallogenic district, located along a NNE-SSW-trending chain of Upper-Oligocene to Mid-Miocene age andesitic to dacitic volcanoes running along the Argentine-Chile border. The volcanoplutonic arc developed on a Pennsylvanian to Triassic basement composed of granitoids and intermediate to silicic volcanic rocks, overlain by Mesozoic to early Tertiary continental volcanic and clastic rocks. Subsequent erosion of late Tertiary volcanoes exposed the frequently hydrothermally altered sub-volcanic porphyry stocks The overall geological setting of the Maricunga belt corresponds to compounded, interfingering, discontinuous and texturally highly variable strato-volcanic accumulations. Although active volcanism is present in Northern and Southern Chile, there is no 'recent' volcanic activity in the Maricunga belt. The Property is located in the central part of the Maricunga Belt, directly between the Maricunga |

| Criteria | JORC Code explanation | Commentary |
|--|--|---|
| | | <p>Mine (Ex-Refugio) and the Marte-Lobo project, both owned and operated by Kinross. The Maricunga Belt hosts numerous porphyry and epithermal style Au and Au-Cu style deposits.</p> <ul style="list-style-type: none"> • The Pantanillo gold deposit is over 850m long and between 200m-600m wide and remains open along strike and down-dip. The mineralised zone strikes NE-SW and dips at 30-45 deg to the southwest Mineralisation is hosted in weathered and altered andesitic porphyry with sheeted and stockwork quartz veins. Oxide zones contain kaolinite, alunite, with limonite/goethite and hematite after pyrite. Fresh rock has a chlorite +/- magnetite +/- pyrite +/- quartz alteration assemblage, with denser vein swarms, local breccia zones and late quartz-alunite veins hosting mineralisation, commonly with higher gold grades. • |
| <p><i>Drill hole Information</i></p> | <ul style="list-style-type: none"> • <i>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:</i> <ul style="list-style-type: none"> ○ <i>easting and northing of the drill hole collar</i> ○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i> ○ <i>dip and azimuth of the hole</i> ○ <i>down hole length and interception depth</i> ○ <i>hole length.</i> • <i>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.</i> | <ul style="list-style-type: none"> • Drill hole information is provided at end of the document |
| <p><i>Data aggregation methods</i></p> | <ul style="list-style-type: none"> • <i>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.</i> • <i>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</i> | <ul style="list-style-type: none"> • The drillhole intersections are weighted averages reported at downhole widths. The basis of reporting the intersections is not stated. However, it is fair to assume a lower cutoff of around 0.15g/t Au (allowing for up to 6m of internal dilution) has been used to generate the broader intersections, with contained higher grade zones also being reported at maybe >=0.5g/t Au allowing for up to 6m of |

| Criteria | JORC Code explanation | Commentary |
|--|---|---|
| | <p>examples of such aggregations should be shown in detail.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. | internal dilution. |
| Relationship between mineralisation widths and intercept lengths | <ul style="list-style-type: none"> These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). | <ul style="list-style-type: none"> Mineralized zone over 850 m long and strikes in a 300 degree direction and is 200-600 m wide, dipping 30° to 45° to the southwest. The drilling is generally oriented between 0 and 20 degrees or N-NNE. Hole dips are generally 60 degrees, some slightly steeper and shallower. Most of the mineralised intersections are estimated to be approximately 75-90% of true width. |
| Diagrams | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> A cross section and level plan are shown in the report as Figures 3 and 4. Drill intersections are also reported in the document |
| Balanced reporting | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> All data currently available to the Company that relates to drilling has been reported most of which is available in the Ni43/101 reports that are referenced in the document, with links provided. |
| Other substantive exploration data | <ul style="list-style-type: none"> 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. | <ul style="list-style-type: none"> The drilling data and QFE reported is supported by metallurgical testwork of drill samples which have indicated much of the mineralisation is amenable to heap leach treatment after crushing to 80% -25mm. Bulk density measurements have been performed and sufficient drill core has been geotechnically logged. An assessment of copper and arsenic has been undertaken as potentially deleterious or contaminating substances. No material issues were identified. |
| Further work | <ul style="list-style-type: none"> The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. | <ul style="list-style-type: none"> Key activities proposed such as metallurgical testwork on old and new drill core will assist in determining cut-off parameters. Pit optimisations may also be conducted on the new Mineral Resource leading to further technical studies to potentially define Ore Reserves. |

Collar details

| HOLE ID | East WGS84 | Norte WGS84 | mASL | EOH | Azimuth | Dip |
|--------------|------------|-------------|--------|-------|---------|-----|
| PNN-11-50DDH | 492793.5 | 6964696.3 | 4624.4 | 380.8 | 11 | -60 |
| SR97-PN04 | 492829.6 | 6964897.4 | 4596.8 | 250 | 14.3 | -64 |
| SR97-PN09 | 492848.7 | 6964994.8 | 4586.3 | 250 | 12.6 | -61 |
| SR97-PN16 | 492814.4 | 6964794.8 | 4620.4 | 200 | 14.2 | -58 |
| SR97-PN17 | 492795.6 | 6964705.2 | 4624.7 | 228 | 16.5 | -60 |
| PN-02 | 492756.0 | 6964616.4 | 4621.8 | 446.3 | 15.8 | -55 |
| PN-03 | 492847.2 | 6964999.8 | 4586.7 | 502 | 285.7 | -55 |

Intersection details

| Hole ID | from (m) | to (m) | int (m) | Au (g/t) |
|--------------|----------|--------|---------|----------|
| PNN-11-50DDH | 72 | 76 | 4.0 | 0.33 |
| PNN-11-50DDH | 84 | 88 | 4.0 | 0.63 |
| PNN-11-50DDH | 144 | 176 | 32.0 | 1.02 |
| PNN-11-50DDH | 232 | 264 | 32.0 | 0.81 |
| PNN-11-50DDH | 304 | 342 | 38.0 | 0.34 |

For personal use only