

# **Orosur Mining**

### A new dawn cometh

As Orosur Mining (OMI) continues to extend San Gregorio's mine life (a raft of new exploration programmes seek to extend reserves by more than 100koz), the company recently sought additional funds to advance exploration at its very promising Anzá gold and base metals project in the highly prospective middle-caucus region of Colombia. With initial drilling to recommence shortly, historical exploration results highlight the area's potential. We believe Anzá has the potential to provide a long overdue rerating of this highly competent gold producer.

| Year end | Revenue<br>(US\$m) | PBT*<br>(US\$m) | EPS*<br>(c) | DPS<br>(c) | P/E<br>(x) | Yield<br>(%) |
|----------|--------------------|-----------------|-------------|------------|------------|--------------|
| 05/16    | 42.9               | 3.2             | (1.2)       | 0.0        | N/A        | N/A          |
| 05/17    | 44.2               | 2.1             | 2.6         | 0.0        | 8.8        | N/A          |
| 05/18e   | 42.9               | 10.1            | 8.3         | 0.0        | 2.7        | N/A          |
| 05/19e   | 51.3               | 14.9            | 12.1        | 0.0        | 1.9        | N/A          |

Note: \*PBT and EPS are normalised, excluding amortisation of acquired intangibles, exceptional items and share-based payments.

# A solid start to FY18 production at San Gregorio

San Gregorio (SG) produced 35,751oz Au at cash operating costs of US\$829/oz (our FY17e cash cost was US\$924/oz – net of minor silver by-product credits). Production and cash costs both came in at the bottom end of previous guidance (35koz to 40koz at AISC between US\$800/oz and US\$900/oz). Now in production (the first full quarter of production was Q4), the SG West UG mine will provide the mainstay of FY18 production (NB development thus far has been cash flow funded).

# Anzá exploration gets the financing it needs

We are pleased to see that Orosur has secured funding for an initial 15,000m of drilling at its Anzá project in Colombia. The Mid-Cauca region of Colombia is host to a wide range of mining projects, from the smaller Red Eagle type mines to the very large 28Moz La Colosa owned partly by Anglo American. Orosur states that its focus is on delineating a small to medium, high-grade epithermal-type gold and base metal resource. We view Colombia as a rising star among previously unfavoured exploration jurisdictions, and a successful drill campaign and maiden resource at Anza would be a key catalyst to Orosur's shares.

# Valuation: Revised for forex, results and dilution

We have revised our valuation for FY17 results. Our FY18 forecast is based on 40koz Au being produced (OMI guides to 35-40koz being produced in FY18). We estimate total cash costs (including royalties, refining and transport costs) in FY18 of US\$845/oz. Our previous (FY17 to FY23) valuation moves forward a year and reduces from our last valuation (published in January) by 6p to £0.29 (C\$0.43). This uses a 10% discount rate, our in-house gold price deck and a revised cable rate of 1.34 (vs 1.29 previously). We also see a potential first-pass 4.4p/share value for Anzá dependant on a 0.5Moz resource delineated and valued on an EV/oz basis at 31.17/oz Au, which in itself could add c 26% to Orosur's market capitalisation.

#### FY17 results & FY18 outlook

Metals & mining

#### 10 October 2017

AIM

 Price
 17.13p

 Market cap
 £20m

 US\$1.33/£, C\$0.80/US\$

 Net cash (US\$m) at 31 May 2017
 3.0

 Shares in issue
 117.6m

 Free float
 86%

 Code
 OMI

 Primary exchange
 TSX

#### Share price performance

Secondary exchange



#### **Business description**

Orosur Mining owns (100%) and operates its San Gregorio gold mine in Uruguay. It explores for gold close to San Gregorio and further afield in Chile, at the Anillo gold property. It also owns 100% of the highly prospective, high-grade Anzá gold property in Colombia, which is currently undergoing a 15,000m drill programme.

#### **Next events**

Q118 results October 2017

Anza maiden resource H218

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Edison profile page

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# **Investment summary**

# Company description: Opening a new door for Orosur

In recent years Orosur's valuation has been almost entirely linked to its San Gregorio mine in Uruguay and this will likely continue to support, at minimum, the company's market valuation at current mining levels of 30-35koz per annum. However, a key potential staging point for the company lies in its exploration of the Anzá project in Colombia. The region's geology is well known to be highly prospective, with a number of active exploration programmes and increasing investment in the area by mining juniors. This is likely to draw the attention of major mining companies to these viable deposits in a politically stabilising region. The recent investment by Newmont of US\$109m at a 46% premium to its share price (and now holding 19.9%) in Continental Gold with its 3.7Moz at 8.4g/t Au reserve Buriticá gold mine, further up the Mid-Cauca belt from Anzá, is an interesting example as it exhibits similar metallurgical and grade characteristics to historical drill data at Anzá.

The reader should also be aware that the previous custodian of the Anzá project, Waymar Resources, was headed by renowned South American mining executive and geologist Pablo Marcet. Mr Marcet, after the acquisition of Waymar by Orosur in 2014, transferred to the Orosur board as an executive director, and has only recently left to join the board of the world's largest gold producer, Barrick. Waymar Resources, an exploration stage company, saw its fortunes diminish in line with the broader exploration market post the gold price crash of April 2013.

# Valuation: SG provides base case, upside linked to exploration

Our base case valuation for Orosur is, for now, still intimately linked to the San Gregorio mine. We await new drilling results and resource and reserve estimates to value further extensions to San Gregorio's mine life and also the company's Anzá project in Colombia. Our base case valuation for SG assumes 38% of its 382koz indicated and measured mineral resource (excluding current reserves) will be converted into reserves based on an average of historical conversion rates. This leads to a San Gregorio mine life extending through to FY24. We maintain San Gregorio operating costs in line with current levels and assume ongoing exploration and capital expenditure costs each of US\$4m per annum. On this basis our base case valuation is 29p per share. This uses a 10% discount rate and our in-house gold price assumptions.

#### Financials: Funded for both production and exploration

Orosur finished FY17 with net cash of US\$3.0m after achieving gold sales of US\$44.5m (average gold price received: US\$1,258/oz). Operating cash costs were US\$29.3m or US\$829/oz, providing a gross margin of 34%. Other costs totalled US\$1.9m, while capex and exploration spends of US\$10.6m and US\$2.6m were also recorded. The company's higher than expected capital expenditure of US\$10.6m (cf 2015: US\$7.7m, FY16: US\$3.7m) was due to the build-out of its SG UG West mine which was fully funded from internal cash flows.



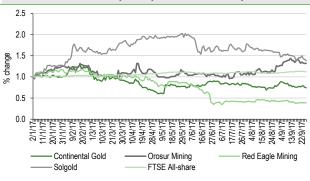
# Orosur: The new (old) kid on the block

Orosur's share price of 17p, or 23c, is at a hefty 24% discount to its FY17 net asset value. However, the stock has performed favourably against notable peers (see Exhibit 1), returning 22% year-to-date (on a three-month view, this becomes 26%) compared with SolGold's 50% (three months, -8%), Continental Gold's -32% (three months, -23%) and Red Eagle Mining -65% (three months, -5%).

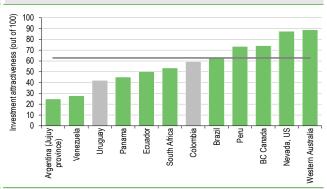
This could reflect Orosur's ability to generate a stable gross margin of 29% at its operating San Gregorio gold mine in Uruguay, and its relatively high level of investment in San Gregorio which materially reduces its tax exposure. Orosur has also maintained a healthy pro-growth exploration budget (US\$17m total exploration spend across all projects for the period 2014-17) with the majority used across its solely owned 100km long Isla Cristalina belt in Uruguay. Additionally, it is funded to explore one of the world's newest, highly prospective and relatively stable exploration and mining jurisdictions – Colombia – and in particular the middle-caucus region. The Mid-Cauca belt is home to numerous small- to large-scale precious and base metals mines associated with relic plate tectonic boundaries.

Exhibit 2 below shows the investment attractiveness of Uruguay and Colombia relative to regional peers according to the Fraser Institute's annual survey of mining companies 2016 (published February 2017). Uruguay is placed sixth from bottom in the overall Fraser Institute Mining Index. This apparent risking is not, however, reflected in any overall pattern in Colombian mining shares, possibly due to a lack of survey responses, as Uruguay is not a well-known mining centre. Red Eagle's fortunes can be pinned to operational difficulties at its new mine, while Continental Gold's fortunes in Colombia are harder to explain as its share price has deteriorated even with Newmont increasing its position in the company to just under 20%. SolGold's share price has seen some decreases since the start of June as the market continues to speculate on the overall size of the Cascabel deposit located in northern Ecuador.

Exhibit 1: Ytd share price performance cf peers



**Exhibit 2: Fraser Institute investment attractiveness** 



Source: Thomson Datastream

Source: Fraser Institute 2016 mining survey. Note: Grey line = global average of 62.8.

As Orosur maintains a profitable mine in Uruguay and strong exploration positions in both Uruguay and Colombia, we believe the company is well positioned to continue its outperformance relative to peers, especially if it meets investor expectations that it can start to replicate and improve on the historical drill results at Anzá achieved by previous owner Waymar Resources (see Exhibit 10). We do not expect Anzá exploration results to indicate a very large porphyry style deposit, rather a smaller, though higher-grade resource that could be mined via a relatively small and vastly cheaper operation.



# Increased exploration spend drives investment case

In FY17 San Gregorio produced 35,751oz Au (the lower end of its 35koz to 40koz guidance) at allin sustaining costs of US\$829/oz (also at the lower end of its US\$800/oz to US\$900/oz guidance). AISC came in 10% lower than our FY17 estimate of US\$924/oz. All AISC figures are net of minor silver by-product credits. The SG West underground (UG) mine now in production (the first full quarter of production was Q417) will provide the mainstay of Orosur's guided FY18 production of 30koz to 35koz gold at an AISC cost of between US\$800/oz and US\$900/oz. With SG UG West development funded internally and supported by current reserves and drill results indicating further potential to the east and at depth, and its ability to generate c 30% gross margins on a sustainable basis, we are confident that further exploration across the Isla Cristalina trend will be financially supported by SG cash flow generation and that further additions to the company's gold reserves will be made.

Orosur states that it is looking to add in excess of 100koz gold to its reserve base via the discovery of a new deposit within trucking distance of its San Gregorio plant, which currently has 40% excess processing capacity. This exploration objective is, in part, being driven by a complete overhaul of its structural and geological modelling of the wider San Gregorio trend, which Orosur controls across a 100km length. Re-analysis of exploration and drilling data over the Isla Cristalina corridor has already identified a number of cross-cutting structures, which can provide economically viable gold resources. Orosur has budgeted US\$2m for FY18 to help complete this task.

#### SG development and drilling key to extending mine life

A key focus for Orosur has been developing the infrastructure in and around the existing underground San Gregorio mining complex in order to grow out production at its new underground project, San Gregorio West (see Exhibit 3 below). The development of this zone is critical to maintaining a solid production footing at San Gregorio, and will provide a significant portion of the company's FY18 expected gold production of between 30koz and 35koz.

SG UG
West
SG UG
SG UG
East
SG East Open Pit
Extension

SG UG
East
SG Wug Deep
Extension

Exhibit 3: San Gregorio UG Cross Section looking North - highlighting mineralised zones

Source: Orosur Mining

The main exploration areas across the San Gregorio trend highlighted by Orosur are as follows:

 San Gregorio Underground (SG UG): Current defined reserves of 34,633oz (664,861 tonnes at 1.62 g/t Au) across three areas: East, West and Central (see exhibit above).



- Veta A: This is another underground target area and another past producing open pit within the San Gregorio trend; it has currently defined reserves of 9,440oz, or 122,328 tonnes at 2.40g/t Au. NB these reserves are associated with an open pit that has been backfilled.
- El Muro: This target is the first to result from Orosur's reinterpretation of its historical drill and exploration database. El Muro has currently defined maiden reserves of 3,000oz of gold situated in a 'horsetail structure'. We would interpret this to be an en-echelon structure bounded on either side by compressional strike- or dip-slip faults. The company's statement that additional sub-parallel mineralised structures could be present supports this interpretation as there may well be associated compression-style faults to the parent fracture. In its FY17 results commentary, management highlighted that one drill result from testing this area has yielded seven metres grading 1.38g/t gold in drill hole EMRC 17-020, with "further work ongoing" at this deposit.
- Additional reserves may result from the mining out of crown pillars from past producing open pit and underground deposits. Crown pillars are bodies of rock that are usually mineralised as they are typically situated within the boundaries of existing resource models. Crown pillars occupy the space between the floor of the open pit and the very top of the designed underground development and protect the underground workings from a possible cave-in of the open pit floor. The mining out of crown-pillars could yield significant tonnages.
- Orosur also has the option to define larger open pittable reserves from combining the resource models of multiple deposits. While this may result in far lower mine gold grades (as more waste rock could be included in the reserve base calculation), it could result in an operation that supports longer-life, lower-cost gold production through far greater economies of scale. We understand this option is very much a work in progress and is utilising the vast database of drill and exploration data that Orosur maintains across the San Gregorio trend.

# Greater returns eyed from exploration spend

As at 31 May 2017 SG had 123koz at 1.42g/t Au in its code compliant (NI 43-101) reserve estimate. This is a year-on-year decrease in terms of reserve ounces of only 3% (2015-16 saw a decrease in reserves of 20% due to mine depletion coupled with a low level of new reserve delineation). With current reserves equating to a further three or so years of mining at current production rates, it is critical for OMI's measured and indicated resource base to be converted into ore reserves. SG has measured and indicated resources (as at end May 2017) of 502koz, as follows:

| Exhibit 4: SG mineral resources and ore reserves (NI 43-101 compliant) |            |              |            |  |  |  |
|--|------------|--------------|------------|--|--|--|
|  | Tonnage Kt | Grade g/t Au | Gold oz Au |  |  |  |
| Mineral resources  |            |              |            |  |  |  |
| Total M&I  | 11,493     | 1.36         | 502,512    |  |  |  |
| Inferred   | 2,171      | 1.10         | 77,097     |  |  |  |
| Ore reserves   |            |              |            |  |  |  |
| Total P&P  | 2,693      | 1.42         | 122,949    |  |  |  |
| Source: Orosur Annual Information Report released 29 August 2017       |            |              |            |  |  |  |

During FY17 Orosur spent more on exploration, in Uruguay, per gold ounce produced, than any year since 2009. This is in contrast to the pre-2013 gold price crash period of 2009-2013, when Orosur's previous management spent less and less on a per gold ounce produced basis every year. This underinvestment was coupled with a relatively ad-hoc approach to mining, including a period over 2013 which appears to have been characterised by high-grading, probably a reaction to the deterioration of the gold price in that year. An important factor consider however, is thay although its reserve numbers have been falling year on year, Orosur has mined mores gold ounces than it started with in reserves in 2009, as shown in the following exhibit:



0.6 0.5 0.4 Gold (Moz) 0.06 0.24 0.30 0.35 0.42 0.39 0.3 0.2 0.1 0 2009 2010 2011 2012 2013 2014 2015 2016 2017

Exhibit 5: SG reserves (LHS) with cumulative production 2009 to 2017

Source: Company accounts and Edison Investment Research

Gold reserves (Moz)

Based on our calculation of Orosur's average resource to reserve conversion at San Gregorio from FY09 to FY17, we would expect OMI to be able to convert around 38% of its 382koz (Exhibit 4) of available (ie net of reserves) measured and indicated resources into reserves, that is an addition of c 144koz. Combined with its current reserve base, this could mean OMI has at hand c 267koz (not accounting for reserve depletion since 31 May 2017) of mineable gold at San Gregorio based on existing geological knowledge alone. Factoring in gold recovery of 95%, then this estimated reserve base could easily satisfy an eight-year valuation horizon at current mining rates of between 30koz and 40koz per annum. Further, this potential 267koz reserve base than underpins our own valuation horizon assumption for OMI's flagship mine of seven years (FY18-FY24).

■ Cumulative production

The following exhibit details Orosur's gold production at San Gregorio, gold reserves and Uruguayan exploration spend for the period FY09 to FY19e. We forecast exploration expenditure of US\$4m in both FY18 and FY19.

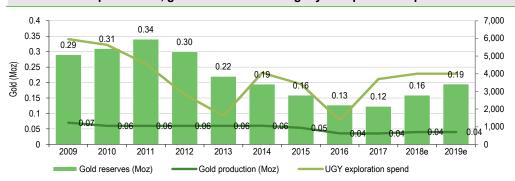


Exhibit 6: Gold production, gold reserves and Uruguayan exploration spend FY09-19e

Source: Company accounts and MD&A and Edison Investment Research

#### New reserves coming through from re-analysing old data

We stress that with a number of target areas highlighted to extend current gold reserves resulting from a far more robust geological and structural interpretation of San Gregorio's mineralisation, we expect its current trend of resource to reserve conversion to reverse. An early indication of this starting to happen is in the delineation of a small 3,000oz maiden reserve estimate for the El Muro deposit. This gives us confidence that Orosur's new geological and structural model for San Gregorio/Isla Cristalina will, among other things, be proven through successfully intercepting a high number of economically viable gold assays results.



# Average gross margin of 29% maintained since 2014

Orosur has managed its operating cash cost (pre-tax) level below US\$1,000/oz since the start of FY14. The chart below indicates an average gross margin across the period Q114 to present of 29%. Clearly, the prevailing gold price has a considerable bearing on profitability, but credit should also be attributed to the company's successful focus on cash cost control at the mine level, with costs maintained within a US\$200 range between US\$754/oz to US\$954/oz from 2014 to 2017(Exhibit 7). This compares favourably with Orosur realising an average price per ounce sold bound within a US\$234/oz range from US\$1,100/oz to US\$1,324/oz. Margin control will continue to be critical at San Gregorio as the company manages its SG UG West development through its ramp-up as well as undertaking continued exploration of the broader Isla Cristalina greenstone corridor and, of course, the newly commenced drilling at Anza in Colombia.

Exhibit 7: San Gregorio cash costs (before taxes) US\$/oz, Q114 to present 50% 1,400 1.200 1,000 800 600 400 200 0 Q414 Q115 Q215 Q315 Q415 Q116 Q216 Q316 Cash cost before taxes (US\$/oz) Average sales price (US\$/oz)
 Avgerage gross margin

Source: Company Management Discussion & Analysis (MD&A), Edison Investment Research

# Base case valuation pinned to SG only, for now

The following exhibit gives Edison's forward projections of gold production and costs for the San Gregorio mine from FY18 (current year) through to the end of our valuation horizon in FY24.

|   | Units   | FY18e  | FY19e  | FY20e  | FY21e  | FY22e  | FY23e  | FY24e  |
|---|---------|--------|--------|--------|--------|--------|--------|--------|
| Gross revenue (after silver and waste sales)        | US\$m   | 42.9   | 51.3   | 56.8   | 56.4   | 53.8   | 53.7   | 52.9   |
| Net revenue   | US\$m   | 42.9   | 51.3   | 56.8   | 56.4   | 53.8   | 53.7   | 52.9   |
| Total royalty                                       | US\$m   | (2.0)  | (2.3)  | (2.3)  | (2.3)  | (2.2)  | (2.1)  | (2.1)  |
| Gold production (open pit)                          | kozpa   | 21.9   | 21.9   | 23.7   | 23.7   | 23.7   | 23.7   | 23.7   |
| Gold production (underground)                       | kozpa   | 13.0   | 17.9   | 17.9   | 17.9   | 17.9   | 17.9   | 17.9   |
| Gold production (stockpile)                         | kozpa   | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    | 0.0    |
| Total gold recovered (94.5% recovery)               | %       | 34.8   | 39.8   | 41.6   | 41.6   | 41.6   | 41.6   | 41.6   |
| By-product silver produced                          | kozpa   | 36.9   | 44.4   | 45.9   | 45.9   | 45.9   | 45.9   | 45.9   |
| Total cash operating costs                          | US\$m   | (32.0) | (35.7) | (36.0) | (36.0) | (35.9) | (35.8) | (35.8) |
| Total production costs (incl. depreciation charges) | US\$m   | (39.2) | (42.9) | (36.0) | (36.0) | (35.9) | (35.8) | (35.8) |
| Gross operating cash flow                           | US\$m   | 11.6   | 16.3   | 21.5   | 21.1   | 18.7   | 18.5   | 17.8   |
| Tax paid  | US\$m   | (1.1)  | (2.3)  | (5.4)  | (5.3)  | (4.7)  | (4.6)  | (4.4)  |
| Total capital costs                                 | US\$m   | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  |
| exploration capex                                   | US\$m   | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  | (4.0)  |
| Cash operating costs (C1 eqv.)                      | US\$/oz | 845    | 821    | 785    | 785    | 785    | 785    | 785    |

Though the company does not provide long-term production targets, based on the recent turnaround in production efficiencies, prudent cost control and stable reserve base, we consider



continuing gold production at or around similar levels to FY17 as a reasonable assumption for valuing the company.

On this basis, and incorporating our forecasts, our base case valuation for Orosur is 29p. This assumes 38% of its 502koz indicated and measured mineral resource will be converted into reserves based on an average of historical conversion rates. This leads to a San Gregorio mine life extending through to FY24. We forecast exploration expenditure of US\$4m per annum. Capital expenditure is also forecast at US\$4m per annum. We apply a 10% discount rate and our in-house gold price assumptions as given below.

| Exhibit 9: Edison's gold price assumptions |       |       |       |       |       |       |       |       |       |       |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Calendar year                              | 2017  | 2018  | 2019  | 2020  | 2021  | 2022  | 2023  | 2024  | 2025  | 2026  |
| NEW Real gold price (US\$/oz)              | 1,275 | 1,220 | 1,284 | 1,362 | 1,344 | 1,281 | 1,274 | 1,257 | 1,245 | 1,264 |
| Source: Edison Investment Research         |       |       |       |       |       |       |       |       |       |       |

# Anzá: Drilling commences; first pass relative valuation

With an initial 15,000m drill programme underway, the longer-term potential of the Anzá project should now start to be recognised. We see the potential for Anzá to de-risk the investment profile of Orosur through identification of an economically viable deposit in Colombia as a critical component of Orosur's future growth profile. The current drill programme is focused on filling in data gaps within the historical drilling database undertaken by previous owner (until 2014) Waymar Resources, and a maiden resource could be released as early as end H217, which would provide the first code compliant estimate with which to benchmark the Anzá deposit against its peers.

Based on our view of available data for Anzá (including historical Waymar Resources, see Exhibit 10), we have high confidence in a successful drill campaign being completed, with results and a consequent maiden resource estimate providing potential share price catalysts in coming months.



| Exhibit 10: Hi | storical Waymar | Resources | drill data from | the Anzá dep | osit   |        |
|----------------|-----------------|-----------|-----------------|--------------|--------|--------|
| Hole number    | From (m)        | To (m)    | Interval (m)    | Au g/t       | Ag g/t | Zn (%) |
| MAP-11         | 213.0           | 219.0     | 6.0             | 18.26        | 1.95   | 0.35   |
| including      | 217.5           | 219.0     | 1.5             | 72.30        | 6.90   | 0.93   |
| MAP-20         | 145.0           | 186.0     | 41.0            | 3.85         | 1.39   | 1.25   |
| including      | 171.3           | 177.0     | 5.7             | 19.84        | 3.94   | 1.66   |
| MAP-21         | 224.0           | 242.0     | 18.0            | 14.14        | 2.05   | 2.83   |
| including      | 225.0           | 229.4     | 4.4             | 45.62        | 5.47   | 10.59  |
| and            | 252.0           | 253.0     | 1.0             | 10.85        | 1.80   | 0.67   |
| MAP-29         | 183.0           | 194.9     | 11.9            | 10.57        | 2.40   | 1.61   |
| including      | 185.0           | 187.0     | 2.1             | 40.25        | 4.85   | 4.64   |
| MAP-33         | 157.1           | 179.5     | 22.4            | 10.42        | 1.87   | 1.56   |
| including      | 165.0           | 170.8     | 5.8             | 29.49        | 3.37   | 2.81   |
| MAP-36         | 198.6           | 227.5     | 28.9            | 3.88         | 1.68   | 0.43   |
| including      | 205.5           | 217.5     | 12.0            | 8.83         | 2.65   | 0.59   |
| MAP-38         | 123.4           | 124.5     | 1.1             | 15.40        | 3.60   | 1.94   |
| and            | 172.0           | 212.5     | 40.5            | 14.09        | 3.82   | 1.95   |
| including      | 179.5           | 186.0     | 6.5             | 70.99        | 6.34   | 0.12   |
| including      | 184.6           | 186.0     | 1.4             | 176.00       | 15.20  | 0.39   |
| including      | 202.0           | 205.4     | 3.4             | 20.89        | 9.71   | 4.75   |
| MAP-43         | 65.5            | 68.6      | 3.1             | 7.66         | 73.04  | 0.68   |
| and            | 167.5           | 231.5     | 64.0            | 1.88         | 1.88   | 0.70   |
| including      | 209.0           | 214.0     | 5.0             | 9.07         | 3.40   | 0.70   |
| MAP-47         | 105.0           | 118.3     | 13.3            | 2.24         | 316.25 | 1.00   |
| including      | 106.0           | 110.5     | 4.5             | 4.69         | 768.89 | 2.34   |
| MAP-48         | 181.0           | 195.7     | 14.7            | 40.37        | 9.30   | 3.41   |
| including      | 185.5           | 195.7     | 10.2            | 58.03        | 13.16  | 4.85   |
| including      | 187.6           | 189.5     | 1.9             | 219.00       | 29.50  | 6.55   |
| Minimum        |                 |           | 1.0             | 1.88         | 1.39   | 0.12   |
| Maximum        |                 |           | 64.0            | 219.00       | 768.89 | 10.59  |

Source: Company announcement dated 2 October 2017

To provide a first-pass indication of value, we apply our in-house gold resource multiple values to Orosur's stated exploration target of 1.6mt to 3.2mt of mineralised material grading 3.2g/t Au to 3.7g/t Au, for between 164.6koz and 273.6koz contained gold.

Our in-situ gold resource multiples can be viewed alongside the constituent supporting data in our October 2016 sector publication Mining overview. The result of applying the average value of a gold ounce in the ground (US\$31.17/oz) across all exchanges (AIM/TSE/ASX) is given in the following exhibit:

| Exhibit 11: In-situ value of Anzá exploration target |            |             |             |  |  |  |  |  |
|--|------------|-------------|-------------|--|--|--|--|--|
| Parameter  | Unit       | Lower bound | Upper bound |  |  |  |  |  |
| In-situ value  | US\$/oz Au | 31.17       | 31.17       |  |  |  |  |  |
| Tonnes   | Mt         | 1.6         | 2.3         |  |  |  |  |  |
| Grade  | g/t Au     | 3.2         | 3.7         |  |  |  |  |  |
| Contained Au ounces                                  | OZ         | 164,612     | 273,603     |  |  |  |  |  |
| In-situ value  | US\$m      | 5.1         | 8.5         |  |  |  |  |  |
| Median value   | US cents   | 6.8         |             |  |  |  |  |  |
| Per share  | US cents   | 5.8         |             |  |  |  |  |  |
| Per share (pence)                                    | pence      | 4.4         |             |  |  |  |  |  |

With 15,000m of new drilling aimed at proving up the above exploration target into a code compliant resource, we consider this a sufficient framework for at least a first-pass illustrative value of Anzá.

Taking the midpoint between the lower bound of the in-situ value (US\$5.1m) and the upper bound (US\$8.5m) as US\$6.8m equates to a per share value of 5.9c or 4.4p (at an FX rate of US\$/£1.33). Alternatively, a valuation of US\$6.8m for Anzá would add 26% to Orosur's current market valuation. Considering that this exploration-type target was based on 17,000m of drilling and a further 15,000m is currently underway, we consider that this illustrative valuation may turn out to be a



conservative view of Anzá's eventual resource size and in-situ value. Comparable transaction or 'deal' type valuations of very early exploration stage assets are unwise as no detailed scoping or feasibility level (ie cost input) data are available to compare between two projects. Further, it would require accurate knowledge down to a stratigraphic level to understand whether Anzá is related geologically to peers located close by to even start to be certain that projects are indeed 'comparable'. The above in-situ valuation is based purely on empirical data derived from the stock market in August 2016, at a time when the gold price was trading at c US\$1,340/oz.

# **Sensitivities**

As with all mining equities, risks relate to raising capital, as well as geological, metallurgical and engineering risks, and a number of macroeconomic and global political risk factors, all of which can negatively as well as positively affect Orosur's operations and work programmes. With San Gregorio a long-established gold mine, a certain amount of engineering, metallurgical and to some extent geological risk is removed due to the amount of experience gained by staff over the normal course of operating the mine and processing plant. Further, the August 2017 raising of US\$3.2m (gross) to fund exploration in Colombia has somewhat diminished the funding risk associated with Orosur's key non-Uruguayan asset.

# Exploration risk: The upside can now be exposed

Orosur is owner and operator of Uruguay's only precious metals mine, and has sole exploration control of a 100km long greenstone belt – Isla Cristalina – that has produced over 1.4Moz to date. This puts the company in a formidable position in terms of having at its command an exploration opportunity that is second to none. There is no other company on the London stock market that is the sole operator in-country of a gold mine and greenstone belt.

We note the company's pre-2013 track record in terms of its lack of ability or willingness to replenish depleted reserves, but also that this was under previous management. With both 2013 and 2016 being very difficult years to navigate for any mine in terms of profitability, it is pleasing to note that Orosur used these periods to go back to basics and re-evaluate all its geological data – aided in no small part by the then non-executive director Pablo Marcet, a noted mining executive and geologist with a vast knowledge of South American geology and experience in developing mining assets.

Although small, El Muro is the first exploration target at San Gregorio to yield new previously unidentified mining reserves (of 3,000oz currently) from using the company's new San Gregorio geological and structural model. If the company now has a firm handle on the geological and structural controls of San Gregorio mineralisation, it is likely that further reserves will be delineated. This is also supported by the general type of San Gregorio mineralisation, which is of numerous mineralised deposits situated from surface to depth limits that have as yet not been determined. An example is the work being done to delineate reserves at the old San Gregorio open pit, which produced over 0.5Moz of gold, and which is now being investigated for further underground mining opportunities. SG UG West is the first of these underground mining opportunities to have entered production (and fully funded via internal cash flow, with no debt taken on or equity raised), and the company is currently assessing whether mining could take place at San Gregorio Central and East underground deposits (Exhibit 3).

# Uruguayan inflation up 9% during FY17

During the FY17, the Uruguayan peso appreciated by 9% (FY16: 13% depreciation) against the US dollar. The exchange rate as of 31 May 2017 was UYU28.292/US\$ (31 May 2016:



UYU30.788/US\$), and is currently trading at UYU28.8/US\$ (as of 3 October 2017). Orosur is exposed to three expenses (salaries, electricity and fuel) denominated in Uruguayan pesos.

# Gold price and discount rate

As with all mining equities, commodity price fluctuations and the discount rate used to value future cash flows have a major effect on valuations. The following exhibit provides a quantitative assessment of changes to these two major factors on our Orosur Mining valuation:

| Exhibit 12: Sensitivity to changes in the gold price    |                   |                  |                |                |                |  |
|---|-------------------|------------------|----------------|----------------|----------------|--|
| Gold price (US\$/oz)                                    | 1,000             | 1,100            | 1,200          | 1,300          | 1,400          |  |
| NPV (£)   | 0.00              | 0.10             | 0.20           | 0.30           | 0.40           |  |
| Source: Edison Investment Research                      |                   |                  |                |                |                |  |
| Exhibit 13: Sensitivity to changes in the discount rate |                   |                  |                |                |                |  |
| Exhibit 13: Sensitivity to d                            | nanges in the dis | scount rate      |                |                |                |  |
| Discount rate (%)                                       | nanges in the dis | scount rate<br>5 | 10             | 15             | 25             |  |
|   |                   |                  | <b>10</b> 0.29 | <b>15</b> 0.25 | <b>25</b> 0.18 |  |

# Financials and forecasts

Orosur finished FY17 with net cash of US\$3.0m (cash US\$3.4m, debt: US\$0.4m) after achieving gold sales of US\$44.5m (average gold price received: US\$1,258/oz). Operating cash costs were US\$29.3m or US\$829/oz at a gross margin of 34%. Other costs totalled US\$1.9m, while capex and exploration spends of US\$10.6m and US\$2.6m were also recorded. The company's higher than expected capex spend (FY15: US\$7.7m; FY16: US\$3.7m) was due to the build-out of its SG UG West mine. After year end, in August 2017, Orosur raised US\$3.2m (gross) proceeds from the issue of c 16m new shares at c C\$19c each (at the time of the equity raise in August 2017, the exchange rate was US\$1.25/£). These proceeds are to be predominantly used to fund the exploration of the company's Anza asset in Colombia. The raise resulted in a 14% dilution of equity.

#### Working capital: Inventory build-up continues

Deterioration in Orosur's working capital has led us to adjust our working capital forecasts. This incorporates our inferred estimates of Orosur's historic creditor and debtor days and stock turn:

| Exhibit 14: Edison's estimate of OMI's working capital |      |      |      |      |      |      |
|--|------|------|------|------|------|------|
|  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
| Debtor days  | 18   | 13   | 15   | 10   | 15   | 13   |
| Stock turn (days)                                      | 67   | 54   | 65   | 80   | 103  | 109  |
| Creditor days  | 94   | 62   | 67   | 95   | 107  | 132  |
| Source: Company accounts, Edison Investment Research   |      |      |      |      |      |      |

Note that creditor days in Exhibit 14 are net of mine site depreciation charges. Management will need to address this situation to alleviate working capital risks and prevent cash flow deficiencies occurring. An improvement in working capital could have a significant and positive effect on the company's cash flow and improve its ability to grow out gold reserves and production and also extend exploration in Colombia, all potentially without returning to the market to raise equity.

We have previously maintained a long-term 25% marginal tax rate for Orosur's San Gregorio mine. Following discussions with management and due to the relatively high levels of capital and exploration expenditure, which can be offset against taxes, we have reduced our marginal tax rate to 5% through to FY21, rising to 10% through to FY22 and 15% for the final two years of our valuation period, FY23 and FY24.



|   | US\$'000s | 2014     | 2015       | 2016     | 2017     | 2018e    | 2019   |
|---|-----------|----------|------------|----------|----------|----------|--------|
| 31-May  | 00,000    | IFRS     | IFRS       | IFRS     | IFRS     | IFRS     | IFR    |
| PROFIT & LOSS   |           | " 110    | 1110       |          |          |          |        |
| Revenue   |           | 80,370   | 65,868     | 42,866   | 44,226   | 42,937   | 51,29  |
| Cost of Sales   |           | (72,905) | (69,715)   | (42,073) | (40,271) | (39,172) | (39,30 |
| Gross Profit  |           | 7,465    | (3,847)    | 793      | 3,955    | 3,766    | 11,98  |
| EBITDA  |           | 23,935   | 10,708     | 9,121    | 9,436    | 17,498   | 18,65  |
| Operating Profit (before amort. and except.)  |           | 5,197    | (5,861)    | 3,146    | 2,293    | 10,298   | 15,05  |
|   |           | 0,197    |            | 3,140    | 2,293    | 0        | 10,00  |
| Intangible Amortisation   |           |          | (43.464)   |          |          | 0        |        |
| Exceptionals  |           | (869)    | (43,164)   | (6,328)  | (101)    |          |        |
| Other   |           | 0        | 0          | 0        | 0        | 0        | 45.05  |
| Operating Profit  |           | 4,328    | (49,025)   | (3,182)  | 2,192    | 10,298   | 15,05  |
| Net Interest  |           | (666)    | (376)      | 24       | (164)    | (224)    | (12    |
| Profit Before Tax (norm)  |           | 4,531    | (6,237)    | 3,170    | 2,129    | 10,074   | 14,93  |
| Profit Before Tax (FRS 3)   |           | 3,662    | (49,401)   | (3,158)  | 2,028    | 10,074   | 14,93  |
| Tax   |           | 1,461    | (4,975)    | 1,948    | 557      | (504)    | (74    |
| Profit After Tax (norm)   |           | 5,123    | (54,376)   | (1,210)  | 2,585    | 9,570    | 14,18  |
| Profit After Tax (FRS 3)  |           | 5,123    | (54,376)   | (1,210)  | 2,585    | 9,570    | 14,18  |
| Average Number of Shares Outstanding (m)  |           | 78.1     | 96.6       | 97.6     | 99.9     | 114.7    | 117    |
| EPS - normalised (c)  |           | 6.6      | (56.3)     | (1.2)    | 2.6      | 8.3      | 12     |
| EPS - normalised fully diluted (c)  |           | 6.6      | (56.3)     | (1.2)    | 2.6      | 8.3      | 12     |
| EPS - (IFRS) (c)  |           | 6.6      | (56.3)     | (1.2)    | 2.6      | 8.3      | 12     |
| Dividend per share (c)  |           | 0.0      | 0.0        | 0.0      | 0.0      | 0.0      | 0      |
|   |           |          |            |          |          |          |        |
| Gross Margin (%)  |           | 9.3      | -5.8       | 1.8      | 8.9      | 8.8      | 23     |
| EBITDA Margin (%)   |           | 29.8     | 16.3       | 21.3     | 21.3     | 40.8     | 36     |
| Operating Margin (before GW and except.) (%)  |           | 6.5      | -8.9       | 7.3      | 5.2      | 24.0     | 29     |
| BALANCE SHEET   |           |          |            |          |          |          |        |
| Fixed Assets  |           | 79,278   | 34,992     | 30,661   | 37,731   | 41,531   | 45,93  |
| Intangible Assets   |           | 41,955   | 18,330     | 20,555   | 21,571   | 27,571   | 31,57  |
| Tangible Assets   |           | 37,323   | 16,662     | 10,106   | 16,160   | 13,960   | 14,36  |
| Investments   |           | 0        | 0          | 0        | 0        | 0        | ,,     |
| Current Assets  |           | 28,410   | 20,925     | 18,159   | 18,033   | 20,659   | 14,26  |
| Stocks  |           | 14,254   | 14,362     | 12,069   | 13,157   | 10,470   | 12,50  |
| Debtors   |           | 3,338    | 1,775      | 1,770    | 1,519    | 1,475    | 1,76   |
| Cash  |           | 10,818   | 4,788      | 4,320    | 3,357    | 8,715    | 1,70   |
| Other   |           | 0        | 0          | 0        | 0,557    | 0,713    |        |
| Current Liabilities   |           | (17,919) | (15,073)   | (11,199) | (14,963) | (8,591)  | (7,78  |
|   |           |          |            |          | (14,761) |          |        |
| Creditors   |           | (13,941) | (13,944)   | (10,946) |          | (8,389)  | (7,58  |
| Short term borrowings   |           | (3,978)  | (1,129)    | (253)    | (202)    | (202)    | (20    |
| Long Term Liabilities   |           | (6,789)  | (6,958)    | (5,426)  | (5,606)  | (5,606)  | (5,60  |
| Long term borrowings  |           | (961)    | (352)      | (99)     | (201)    | (201)    | (20    |
| Other long term liabilities   |           | (5,828)  | (6,606)    | (5,327)  | (5,405)  | (5,405)  | (5,40  |
| Net Assets  |           | 82,980   | 33,886     | 32,195   | 35,195   | 47,993   | 46,81  |
| CASH FLOW   |           |          |            |          |          |          |        |
| Operating Cash Flow   |           | 22,767   | 11,753     | 6,539    | 12,349   | 13,354   | 14,77  |
| Net Interest  |           | (666)    | (376)      | 24       | (164)    | (224)    | (12    |
| Tax   |           | 0        | 0          | 0        | Ó        | Ó        |        |
| Capex   |           | (13,062) | (12,835)   | (6,612)  | (13,199) | (11,000) | (8,00  |
| Acquisitions/disposals  |           | 0        | 0          | 0        | 0        | 0        | (0,00  |
| Financing   |           | 0        | 0          | 710      | 0        | 3,228    |        |
| Dividends   |           | 0        | 0          | 0        | 0        | 0        |        |
| Net Cash Flow   |           | 9,039    |            | 661      |          | 5,358    | 6,65   |
|   |           |          | (1,458)    |          | (1,014)  |          |        |
| Opening net debt/(cash)   |           | 3,362    | (5,879)    | (3,307)  | (3,968)  | (2,954)  | (8,31  |
| HP finance leases initiated   |           | 0        | 0 (4.44.4) | 0        | 0        | 0        |        |
| Other Control of the |           | 202      | (1,114)    | 0        | 0        | 0        | ,,,,,  |
| Closing net debt/(cash)   |           | (5,879)  | (3,307)    | (3,968)  | (2,954)  | (8,312)  | (14,96 |



#### **Contact details**

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# Revenue by geography % 100%

Other

#### Management team

www.orosur.ca

#### CEO: Ignacio Salazar

Ignacio has been CEO of Orosur Mining since March 2013. He joined the company in September 2008 as finance director. He has a 25 years' international experience, prior to Orosur, mostly working as international staff for the Royal Dutch Shell group, in different functions in finance and new business development, working and living in several countries in Europe and South America. He holds master's degrees in business administration and law, both from the University of Deusto in Spain. Ignacio has been president of the Chamber of Mines of Uruguay since 2009.

#### CFO: Alejandra Lopez

Alejandra joined the company in July 2008, having previously held the role of senior auditor at Ernst & Young (2005-08). Alejandra holds an MBA from the Universidad de la República in Uruguay and has experience in finance, accounting, treasury and reporting.

#### VP Planning & Corporate Development: Ryan Cohen

Ryan has worked in the mining sector for over 10 years across a broad range of roles, including investment banking, investor relations, corporate advisory, corporate development and operations. Prior to that, Ryan was a director, equity & debt capital markets at Canaccord Genuity. During his time with Canaccord he advised on approximately US\$7.5bn worth of transactions, including financings, M&A, corporate advisory and debt & commodity related finance.

#### Non-executive director: Roger Davey

Roger is a mining engineer with over 40 years of experience in the mining industry. He is currently a non-executive director of Condor Gold, Atalaya Mining and Central Asia Metals. Previous positions held include assistant director and the senior mining engineer at N M Rothschild (London) in the mining and metals project finance team; director, vice-president and general manager of Minorco/AngloGold subsidiaries in Argentina; operations director of Greenwich Resources plc, London; production manager for Blue Circle Industries in Chile; and various production management roles in gold fields of South Africa.

| Principal shareholders                      | (%)  |
|---|------|
| Toronto Dominion Bank                       | 10.3 |
| Stephens, Paul H.                           | 7.3  |
| Barclays Pic                                | 3.7  |
| Cawkwelle                                   | 3.1  |
| Fidelity                                    | 2.7  |
| Hargreaves Lansdown                         | 2.7  |
| Canaccord Genuity                           | 2.7  |
| Companies named in this report              |      |
| SolGold, Continental Gold, Red Eagle Mining |      |

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