

# **HIGH-GRADE GOLD RESULTS FROM SANTA DEEPS**

- New results provide increased confidence in future underground potential
- Significant new high-grade zone discovered south of "terminating" fault
- Very little drilling below 50 metres depth along +2 kilometres of known shallow gold mineralisation
- Supports plan to progressively increase gold production to +140,000oz pa

Integra Mining Limited (Integra, ASX: **IGR**) is pleased to report new **high-grade gold results** from drilling at depth below the historic **Santa** open pit, part of its 100%-owned Randalls Gold Project development, located 60km south-east of Kalgoorlie.

Drill assay results include:

- > 12.3 metres at 7.53 g/t gold including 1.6 metres at 26.09 g/t gold
- > 5.4 metres at 7.69 g/t gold including 0.7 metres at 25.08 g/t gold
- 1.7 metres at 12.68 g/t gold
- > 6.1 metres at 7.09 g/t gold including 0.5 metres at 37.63 g/t gold
- > 2.7 metres at 5.99 g/t gold

The results provide Integra with increased confidence in the gold mineralised depth potential at Santa, which is one of several key banded-iron formation (BIF) hosted deposits being tested for future underground mining potential. The others are Maxwells and Cock-eyed Bob.

This is part of the previously announced Phase 2 production plan at Randalls, which targets a production increase from the initial rate of 75,000 ounces per year to 100,000 ounces per annum and then +140,000 ounces per annum with a process plant upgrade (see ASX announcement 30 October 2009).

Initial Phase 1 production will be sourced from the Salt Creek and Maxwells open pits. Randalls Gold Project construction commenced on 4 January 2010 and first gold is expected in September 2010.

## New High-Grade Zone Discovered

The new results from Santa demonstrate that banded-iron formation (BIF) hosted gold mineralisation **extends south beyond the Santa South Fault** into an area with no previous exploration (and no delineation style/gridded drilling).

The Santa South cross-fault was previously believed to have "terminated" the southern end of the Santa open pit during mining in the late 1990s (*see Figure 1 below*).

Geological thinking at the time assumed that this fault and other cross-faults were synchronous with and controlled the gold mineralisation; in this case, the Santa South Fault was assumed to be a deposit-terminating cross-fault.

Importantly, Integra has now identified a **significant zone of BIF-hosted gold mineralisation** representing the fault offset of the southerly continuation of the Santa gold



deposit from 140 metres below surface. The gold mineralisation is open at depth (ie, downdip) below 350 metres as well as down-plunge and up-plunge to the south and north respectively.

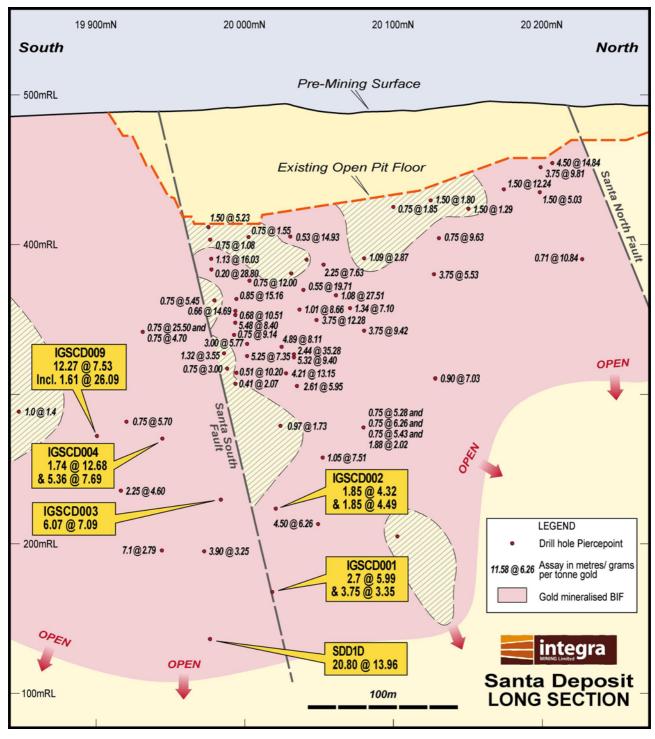


Figure 1: Santa gold deposit long section and drill intercepts.



In addition, the upper extent of this gold mineralisation has not yet been determined and could shallow significantly with further drilling. The geometry of the mineralisation is believed to be a series of high-grade gold shoots which are essentially stratabound to the lowermost BIF unit of a BIF-metasediment package.

Mineralisation is in the form of abundant quartz-sulphide veining with gold occurring predominantly in the veining and sulphide (pyrrhotite, arsenopyrite with lesser pyrite) but also within the BIF wallrock (generally proximal to veining). Gold is commonly present as very-fine to fine-grained free grains and/or clusters within the quartz vein or within/associated with sulphide material in an almost "disseminated" nature of occurrence. The mineralisation is non-refractory.

RC drilling has been planned to test the potential for shallow (offset) gold mineralisation immediately to the south of the Santa open pit.

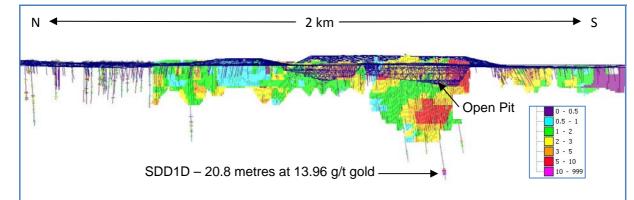
The mineralisation appears to be very predictable in terms of stratigraphic location and is relatively planar (at a drilling scale); these qualities in conjunction with an obvious and geotechnically stable footwall sequence, average horizontal mineralisation widths in the range of 4 to 5 metres and average gold grades in the range of 4 to 6 g/t gold with local pods of extreme high gold grades suggest that a significant underground mining opportunity exists.

Abundant visible gold has been noted (by multiple geologists) during logging/inspections of drillcore. A number of the assay results received to date do not reflect this visible gold abundance. Integra is undertaking a gold deportment and other studies to investigate this phenomenon.

## Santa Region

There are further significant opportunities to delineate additional Mineral Resources / Ore Reserves in the +2 kilometre strike extent of known deposits in the Santa-Craze region alone, namely at Santa North, Anomaly C, Fly Camp, Browns, Browns North and Flora Dora – all of which require further evaluation.

Of note is that the majority of existing drilling is shallower than 50 metres true depth while at the Santa deposit high-grade gold mineralisation (20.8 metres at 13.96 g/t gold) has been demonstrated to a depth of 350 metres below surface and remains open at depth. Drilling has recently been completed at greater depths and results will be released when they become available.



These opportunities will be systematically and progressively tested in the months ahead.

Figure 2: Santa region long section showing resource grades.





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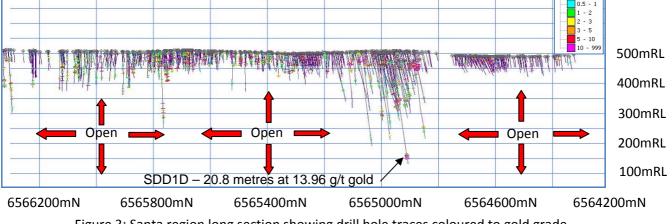


Figure 3: Santa region long section showing drill hole traces coloured to gold grade.

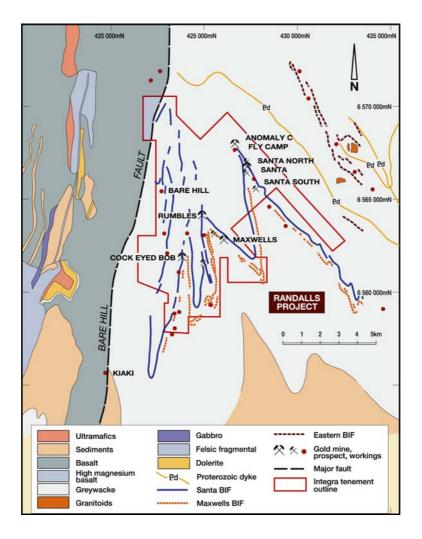
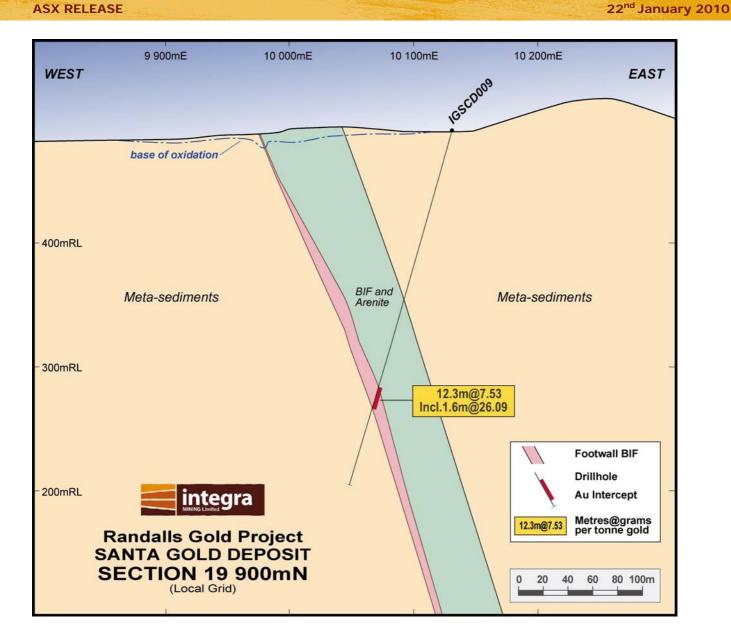


Figure 4: Randalls Project BIF hosted gold deposit location plan.

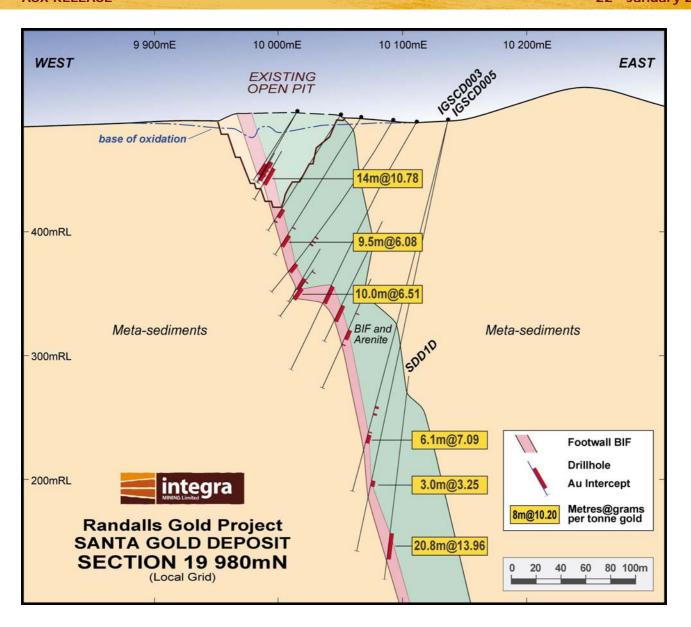
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ntec **MINING Limited** 22<sup>nd</sup> January 2010 **ASX RELEASE** 

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| Hole ID   | Co-ordinates |           | - i              |     | _           | _         | Down             |                |                     |
|-----------|--------------|-----------|------------------|-----|-------------|-----------|------------------|----------------|---------------------|
|           | Northing     | Easting   | Azimuth<br>MGA94 | Dip | From<br>(m) | To<br>(m) | Hole<br>Interval | Grade<br>(g/t) | Comments            |
| IGSCD001  | 425,004      | 6,565,085 | 238              | -77 | 246.2       | 247.0     | 0.9              | 4.95           |                     |
|           |              |           |                  |     | 282.6       | 282.9     | 0.4              | 7.08           |                     |
|           |              |           |                  |     | 297.9       | 299.7     | 1.8              | 3.11           |                     |
| IGSCD001  | 425,004      | 6,565,085 | 238              | -77 | 319.6       | 322.3     | 2.7              | 5.99           |                     |
| including |              |           |                  |     | 320.8       | 321.5     | 0.7              | 9.56           |                     |
|           |              |           |                  |     | 324.7       | 328.5     | 3.8              | 3.35           |                     |
| including |              |           |                  |     | 325.0       | 325.7     | 0.8              | 10.54          |                     |
| IGSCD002  | 425,004      | 6,565,085 | 237              | -72 | 252.0       | 253.9     | 1.9              | 4.32           |                     |
| including |              |           |                  |     | 252.0       | 252.3     | 0.3              | 10.16          |                     |
|           |              |           |                  |     | 270.5       | 276.6     | 6.1              | 1.73           |                     |
| IGSCD003  | 425,034      | 6,565,059 | 241              | -75 | 261.9       | 267.9     | 6.1              | 7.09           |                     |
| including |              |           |                  |     | 263.6       | 264.1     | 0.5              | 37.63          |                     |
| including |              |           |                  |     | 266.0       | 266.5     | 0.5              | 37.05          |                     |
| IGSCD004  | 425,049      | 6,565,035 | 235              | -68 | 219.5       | 221.2     | 1.7              | 12.68          |                     |
| including |              |           |                  |     | 220.3       | 220.8     | 0.5              | 20.66          |                     |
|           |              |           |                  |     | 225.8       | 231.2     | 5.4              | 7.69           |                     |
| including |              |           |                  |     | 225.8       | 226.5     | 0.7              | 25.08          |                     |
| including |              |           |                  |     | 228.4       | 229.1     | 0.8              | 14.85          |                     |
| including |              |           |                  |     | 230.7       | 231.2     | 0.5              | 9.35           |                     |
| IGSCD005  | 425,032      | 6,565,057 | 230              | -78 | 297.0       | 300.9     | 3.9              | 3.25           |                     |
| including |              |           |                  |     | 300.5       | 300.9     | 0.4              | 21.04          |                     |
| IGSCD006  | 425,052      | 6,565,036 | 236              | -78 | 266.0       | 270.9     | 4.9              | 2.98           |                     |
|           |              |           |                  |     | 292.4       | 299.4     | 7.1              | 2.79           |                     |
| IGSCD009  | 425,074      | 6,564,996 | 235              | -73 | 211.4       | 223.7     | 12.3             | 7.53           |                     |
| including |              |           |                  |     | 218.2       | 219.8     | 1.6              | 26.09          |                     |
| SDD1D     | 425,012      | 6,565,077 | 195              | -80 | 337.8       | 358.6     | 20.8             | 13.96          | Reported previously |

#### Selected Santa drill hole intercepts

\* Co-ordinates provided in MGA94

Sampling of drill core was conducted to geological boundaries (≤ 1.0 metre) or 1 metre intervals for RC samples

All samples assayed using a total digest of a 50 g charge by fire assay method



### ABOUT INTEGRA MINING

The Randalls Gold Project development is only the second integrated mining and processing new gold mine development based on a new gold discovery in Australia in the past 10 years. On Phase 1 base case production of 75,000 ounces per year, and at current gold prices, the Randalls Gold Project will generate approximately \$50 million of operating profit per year and will rival or exceed the profitability of any other domestic Australian gold miner with the exception of Newcrest Mining Limited.

The Randalls Gold Project is located some 60 kilometres southeast of Kalgoorlie and is expected to produce an average of 75,000 ounces per year for four years on Phase 1 mining of two open pits at an average grade of 3.1 g/t gold. Integra has approximately \$72 million cash and is completing documentation of a \$45 million senior debt facility with Westpac Banking Corporation and BNP Paribas. The capital cost for project development has been estimated to be \$64 million (see ASX announcement 30 July 2009).

Integra has allowed excess funding of the Randalls Gold Project to accelerate evaluation of early commencement of underground mining at the Maxwells, Santa and Cock-Eyed Bob banded-iron formation (BIF) hosted gold deposits with a target of increasing project gold production to approximately 100,000 ounces per annum without a processing facility upgrade to 1.2 million tonnes per annum (see ASX announcement 30 October 2009). The potential underground developments and processing facility upgrade will be fully funded through existing cash reserves and project cashflow.

The Company acquired the New Celebration gold process facility 3 years ago and the facility was disassembled and stored on-site at Mt Monger. Integra has executed a Guaranteed Maximum Price (GMP) refurbishment, construction and commissioning agreement for the gold processing facility with GR Engineering Services. Refurbishment of key process facility components (ball mill and crushers) is advanced and the Salt Creek process facility site was handed over to GR Engineering on January 4, 2010 for commencement of construction. Project commissioning and first gold production is expected to be September 2010.

Integra has also appointed Alliance Contracting as preferred mining contractor for open pit mining. Legal documentation of the full mining contract is in-progress.

Further, Integra has made full payment to Western Power for the construction of a 42 kilometre mains power line to the Salt Creek process facility.



22<sup>nd</sup> January 2010

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Yours sincerely,

Cl: Ci

**Chris Cairns** Managing Director

Information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Chris Cairns, Managing Director, who has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Chris Cairns is a member of The Australasian Institute of Geoscientists and consents to the inclusion in the report of the matters based on the information in the form and context in which it appears.

