

INTRUSION RELATED GOLD RECOGNISED AT EXCELSIOR GOLD PROJECT, NEVADA, USA

Global Geoscience Ltd

ABN 76 098 564 606

ASX Code: **GSC**

Current share price: **\$0.05**

52 week range: **\$0.03-\$0.08**

Issued Shares: **148M**

Directors Holdings: 12%

Top 20 Holdings: 54%

Market Cap: **\$7M**

Cash: **\$0.3M**

Key Projects

Excelsior Au (NV, USA)

Lone Mt Au (NV, USA)

Bartlett Cu-Au (NV, USA)

Sara Sara Cu-Mo-Ag (Peru)

Mancha Pampa Cu-Au (Peru)

Board of Directors

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HIGHLIGHTS

- **Significant upgrade in size potential of Global's Excelsior gold project in Nevada, USA.**
- **Much larger gold deposit target emerging as latest drilling results indicate an Intrusion Related Gold (IRG) system.**
- **Similarities between Excelsior and major IRG deposits in the Tintina Gold Province of Alaska/Yukon noted by Consultant Dr Richard Sillitoe.**
- **Existing Tintina Province IRG deposits include Donlin Creek (31Moz), Fort Knox (9Moz) and Dublin Gulch (2Moz).**
- **The Excelsior project is fully-funded by Osisko Mining (USA), a subsidiary of Canadian gold producer, Osisko Mining Corporation (TSX:OSK).**
- **Recent wide-spaced drilling intersected broad zones of low-grade gold coincidental with high levels of As, Bi, Mo and Te within strongly altered and quartz-veined country rock.**
 - **GE26: 202m at 0.1g/t gold from 102m**
- **Alteration, quartz-veining and geochemical signature suggest a nearby intrusion.**
- **Previous drilling at the Buster zone intersected ore-grade mineralisation in similarly altered and veined rocks.**
 - **33.5m at 2.7g/t Au from 70.1m**
 - **47.3m at 1.5g/t Au from 71.6m**
 - **48.8m at 0.8g/t Au from 19.8m**
- **Highest grade and thickest mineralisation occurs above and adjacent to granite porphyry dykes.**
- **Potential for multiple, large, flat plunging shoots of oxidised mineralisation.**
- **Mineralisation, alteration, intrusive dykes and prospecting pits are evident over a strike length of 11km, which is largely untested by drilling.**
- **Aeromagnetic and Induced Polarisation (IP) geophysical surveys will be used to locate intrusive bodies and zones of alteration ahead of the next round of drilling.**

Australian exploration company, Global Geoscience Ltd (“Global”) (ASX: GSC), today provided a positive update on its Excelsior gold project in Nevada, USA.

“The size potential at Excelsior has been significantly upgraded by the recognition from latest drilling results and earlier work of Intrusion Related Gold (IRG) mineralisation associated with porphyry dykes”, Global Geoscience Managing Director, Mr Bernard Rowe, said today.

“Previous drill results showed Excelsior to have excellent potential to host a shallow, oxide gold deposit,” Mr Rowe said

“We are now seeing a much larger target beginning to emerge”, he said.

Summary

The Excelsior gold project is located in the Walker Lane Tectonic Zone of southern Nevada. Global and Osisko are earning a 70% interest in the project by spending \$3 million on exploration over four years. Gold mineralisation at Excelsior is hosted within a sequence of altered Palaeozoic carbonates and clastic sediments. Gold is associated with an Ag-As-Bi-Mo-Te hydrothermal system that appears to be related to an E-W trending swarm of granite porphyry dykes. Mineralisation is best developed above and peripheral to the porphyry dykes.

Work conducted by Global with input from consultant, Dr Richard Sillitoe, has led to the recognition of Excelsior as an Intrusion Related Gold (IRG) system. Dr Sillitoe noted the similarities between Excelsior and IRG deposits in the Tintina Gold Province (TGP) of Alaska/Yukon. These include Donlin Creek (31Moz), Fort Knox (9Moz) and Dublin Gulch (2Moz).

Recent drilling by Global in late 2012 targeted Mo-Bi-Te surface geochemical anomalies to the east of the known mineralisation and previous drilling. Eight wide-spaced RC holes were completed for a total of 1976m. Although no ore grade material was intersected, the drilling intersected broad zones of low-grade gold mineralisation and associated Ag-As-Bi-Mo-Te within strongly altered country rock and subsequently led to a reinterpretation of the controls on mineralisation. The potential for multiple flat plunging zones associated with intrusive dykes is now recognised. There is excellent potential to find higher-grade mineralisation in close proximity to the wide, low-grade intersections from the latest drilling.

Previous exploration by Global and others has identified significant ore-grade gold mineralisation over a strike length of 1.5km at depths of less than 100m and entirely within the zone of complete oxidation. At the Buster zone, mineralisation occurs at surface and part of it has been removed by erosion. Elsewhere, mineralisation occurs at shallow depth but is not always evident on surface due to the masking effect of overlying less favourable lithologies.

The target at Excelsior is a multi-million ounce gold deposit. Dyke-related mineralisation as has been found to date is the main target. This mineralisation, which is characterised by porphyry dykes and zones of silicification and quartz veining, is associated with zones of high resistivity in IP geophysical data. A secondary target is for intrusion-hosted mineralisation within a buried or blind intrusive stock.

Similar dyke-related mineralisation, alteration and geochemical anomalism extend over a strike length of 11km. This zone is largely untested by drilling.

Aeromagnetic and Induced Polarisation (IP) geophysical surveys will be used to locate intrusive bodies and zones of alteration ahead of the next round of drilling.

Intrusion Related Gold Model

Excelsior is now recognised by Global as an Intrusion Related Gold (IRG) system. Some of the characteristics that support this model are:

- high arsenic (As), bismuth (Bi), molybdenum (Mo) and tellurium (Te) in surface geochemical and drill samples in proximity to gold mineralisation
- multiple, narrow discontinuous granitic porphyry dikes with the same trend
- extensive zones of silicification and quartz veining
- extensive zones of alteration including quartz, albite, sericite, pyrite, carbonate and chlorite
- extensive zones of hornfels, calc-silicate and skarn alteration that suggest the presence of a large intrusion at depth.

The Tintina Gold Province (TGP) of Alaska/Yukon hosts a number of large IRG deposits. Examples include Donlin Creek (31.7Moz at 2.9g/t), Fort Knox (9.2Moz at 0.9g/t Au) and Dublin Gulch (2Moz at 0.9g/t Au). Gold mineralisation in IRG deposits can be hosted within the intrusive stock, in dyke swarms or in the surrounding hornfels and calc-silicate altered country rock.

Gold mineralisation discovered at Excelsior to date is hosted within hornfels and calc-silicate altered country rock and generally within close proximity to porphyry dykes. The best mineralisation (grade and thickness) is found within silicified sediments immediately above porphyry dykes. The mineralised zones are shallow and have a relatively flat plunge making them amenable to open pit mining methods.

The extent and intensity of hornfels and calc-silicate alteration, high levels of As-Bi-Mo-Te and presence of porphyry dykes suggest the causative intrusion is proximal to known mineralisation and may represent a target for intrusion-hosted mineralisation.

Geology

The Excelsior gold project area covers a sequence of Palaeozoic limestone, limey mudstone, siltstone, shale and quartzite. The sequence is folded with shallow dips to either the north or south. A number of steeply dipping east, north-northeast and northwest trending faults cut the sequence. The sediments have been intruded by a number of thin, mostly east-west trending, discontinuous granite porphyry dykes. At least some of the dykes have intruded along east-west faults. The intrusive rocks have not been dated but are presumed to be of Late Cretaceous age.

Gold mineralisation occurs within quartz veins and zones of pervasive silicification within altered limey mudstone and limestone. Mineralisation is best developed (thickness and grade) above and peripheral to the porphyry dykes (ie. within the apical zone of the dyke), a common characteristic in IRG deposits. The shallow plunging mineralisation outcrops at the Buster zone and some of it has been removed by erosion.

Mineralisation is also present in veining and silica replacement along favourable beds within the limey mudstone units. Massive limestone and non-reactive mudstone/siltstone are not as well mineralised and may have acted as a barrier and cap to mineralising fluids.

The base of complete oxidation occurs at 100m to more than 250m in depth. Consequently most gold mineralisation intersected to date occurs within the oxidised zone.

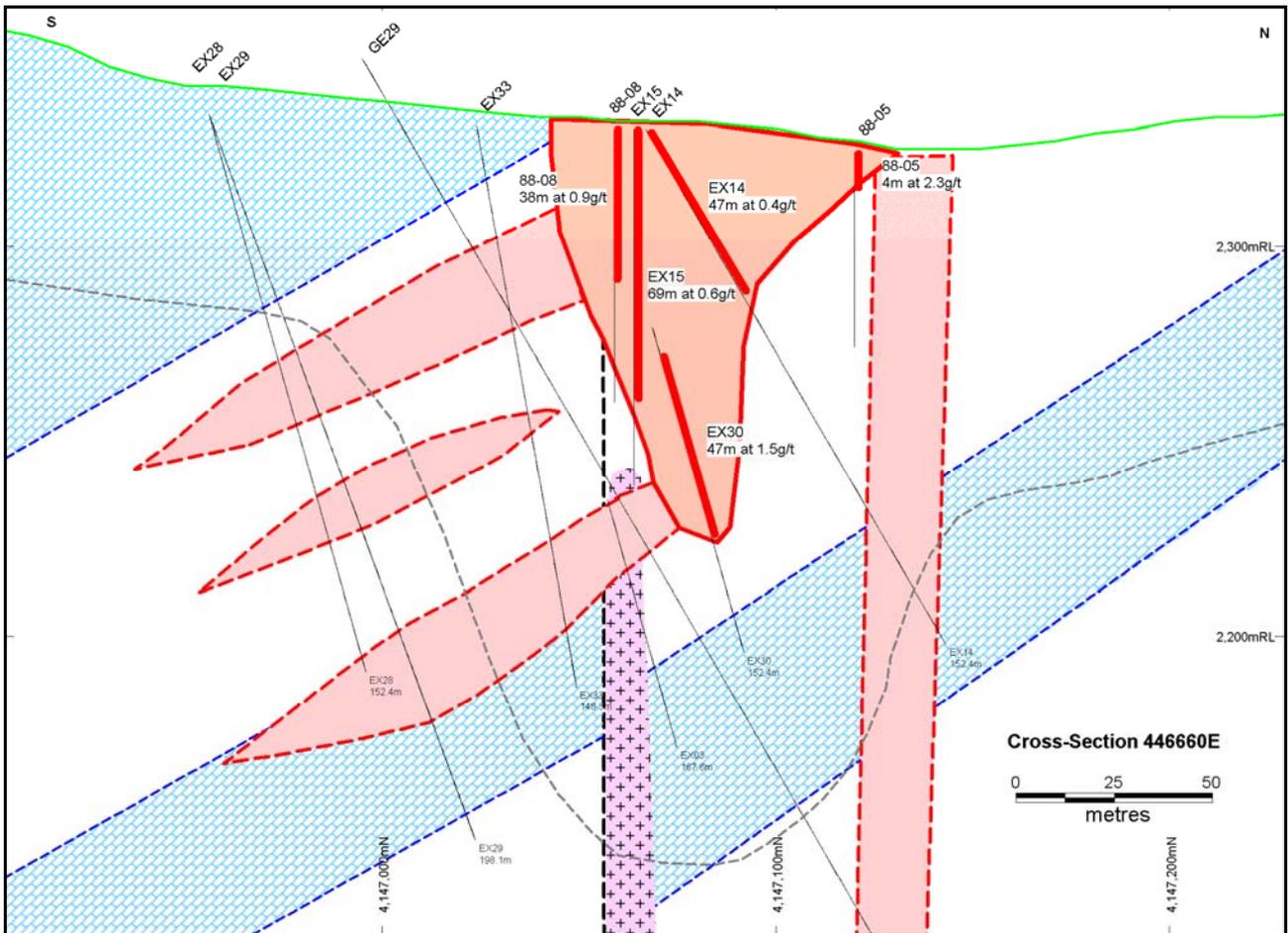


Figure 1. Excelsior cross-section 446660E. Blue – limestone; White – limey sediments; Pink – granite porphyry dyke; Red - drill intersections; Dark red shaded area – mineralisation; Light red shaded area – low grade mineralisation. The dark red shaded area has a cross-section area of approximately 4500 square meters. Note that part of the mineralisation has been removed by erosion. Coordinates are UTM Zone 11 (NAD27).

Drilling

Global completed 8 wide-spaced RC holes at Excelsior in October 2012 (GE24 to GE31). All holes were analysed for gold and a suite of other elements. Seven holes were drilled at the eastern end of the central zone and one hole was drilled beneath the Buster zone. Results were reported on 31 January 2013 in the company’s Quarterly Activities Report.

All holes intersected broad zones of strong silicification, calc-silicate alteration, quartz veining and anomalous levels of As-Bi-Mo-Te. Holes GE24, GE26 and GE31 intersected strongly anomalous levels of As-Bi-Mo-Te. In these three holes, the strong alteration and geochemical anomalism was only present below 70m depth. This is probably due to overlying less favourable rocks.

Holes GE26 and GE31 intersected broad zones of low-grade gold coincidental with strong alteration, stockwork quartz veining and strong As-Bi-Mo-Te anomalism.

- GE26: 202m at 0.1g/t gold from 102m
- GE31: 18m at 0.2g/t gold from 195m and 36m at 0.1g/t Au from 251m

Exploration Potential

Results from surface exploration and drilling provide good evidence that the Excelsior gold project hosts a large, Intrusion Related Gold (IRG) mineralised system comparable to gold deposits found in the Tintina Gold Province of Alaska-Yukon.

Mineralisation within the Buster zone is best developed within strongly altered limey sediments immediately above a granite porphyry dyke. The flat plunging mineralised zones are 30m to 70m wide and extend from surface to approximately 100m depth, making them amenable to open pit mining methods. Some parts of the mineralisation are likely to have been removed by erosion. The mineralisation sits on an 800m long resistivity ridge (resistivity high) thought to represent silicification. There are four other similar resistivity ridges within the area (3x1km) covered by the 2011 IP survey. None of these have been tested by drilling. Drill holes GE14 and GE31, drilled on the margin of one of the untested resistivity ridges, intersected 24m at 1.1g/t Au and 36m at 0.1g/t Au respectively. The untested resistivity ridges represent excellent targets for mineralisation similar to that found to date.

Surface exploration comprising stream sediment, soil and rock chip geochemical sampling has identified multiple zones of anomalous Au, As, Bi, Mo and Te over an 11km long zone within the Excelsior property. Approximately 4km of this zone is covered by a thin veneer or transported cover. The only known drilling is within the central 2.5km section that includes the Buster zone. The entire 11km long zone is highly prospective for IRG mineralisation as evidenced by the presence of granite porphyry dykes, extensive hornfels and calc-silicate alteration and surface Au-As-Bi-Mo-Te anomalism.

Future Work

Proposed future work will include:

- Aeromagnetic survey
- Deep looking IP survey
- Drilling

The aeromagnetic and IP surveys will assist in mapping the intrusive bodies (dykes and larger intrusive stocks) and associated silica-pyrite alteration near surface and at depth. Targets identified through this work, including the existing IP survey, will be drill tested. Zones of known mineralisation will be followed up with infill drilling.

About The Excelsior Gold Project

The Excelsior gold project is located 70km southwest of Tonopah in southern Nevada, USA. Global is earning a 70% interest in the project from Nubian Resources Ltd by spending \$3 million on exploration over four years. Excelsior is subject to an agreement between Global Geoscience and Osisko Mining (USA). Excelsior shows excellent potential to host a large, shallow gold deposit.

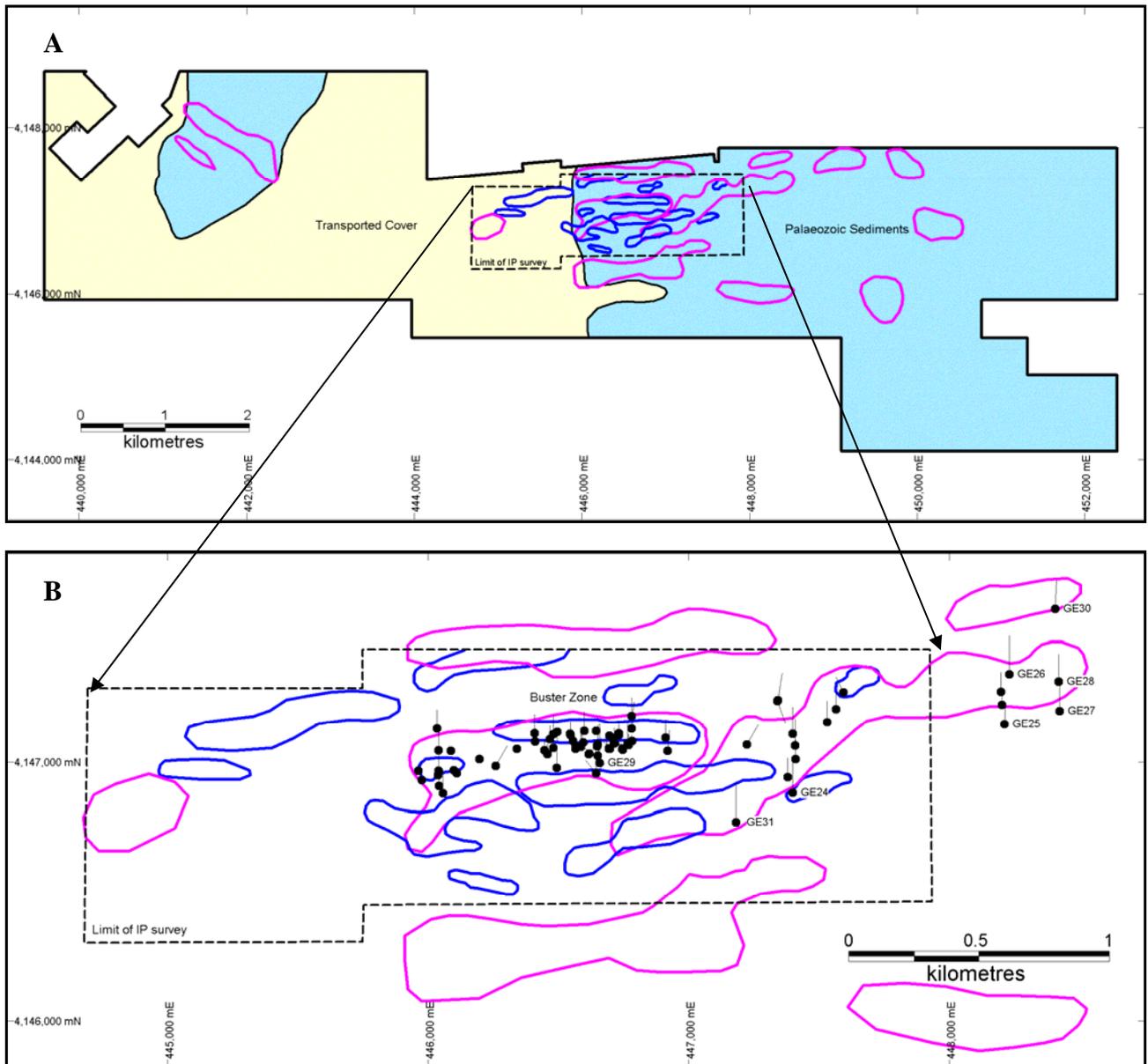


Figure 2. Excelsior gold project showing the location of geochemical and geophysical targets, drill holes and simple geology. Pink – surface geochemical anomalies (Au-As-Bi-Mo-Te); Blue – resistivity highs from IP survey; Black circles – drill holes with trace. Drill holes from the recent program are numbered GE24 to GE31. A. Entire project area. B. Central area of detailed exploration and drilling. Coordinates are UTM Zone 11 (NAD27).

About Global Geoscience

Global Geoscience is a Sydney-based greenfield exploration company targeting gold, copper and silver on its mostly 100%-owned projects in Nevada and Arizona in the United States, and Peru in South America.

Global is in partnership with Osisko Mining (USA) in Nevada. Osisko is fully-funding exploration on Global's five Nevada gold projects. Osisko may earn an initial 45% ownership interest in any or all of the projects by funding US\$8 million over a maximum of four years. Global is operator and manager during this phase. Osisko may increase its ownership in any nominated project from 45% to 70% by sole-funding through to completion of a bankable feasibility study. Global retains 100% of its interest in any projects that Osisko elects not to fund. Osisko is Global's largest shareholder.

References

Bakke, A.A., Morrell, R.P., and Odden, J.C., 1998. The Fort Knox Porphyry Gold Deposit, Eastern-Central Alaska: An Overview and Update. In conference proceedings of Porphyry and Hydrothermal Copper and Gold Deposits – A Global Perspective. In Pert, 1998.

Goldfarb, R.J., Marsh, E.E., Hart, C.J.R., Mair, J.L., Miller, M.L. and Johnson, C. 2007, . Chapter A of Recent U.S. Geological Survey Studies in the Tintina Gold Province, Alaska, United States, and Yukon, Canada—Results of a 5-Year Project Edited by Larry P. Gough and Warren C. Day

Global Geoscience Ltd company announcements:

Date	Title
31/01/13	Quarterly Activities Report for the Quarter ended 31 December 2012

The information in this report that relates to Exploration Results is based on information compiled by Peter Nicholson BSc(Hons) FAusIMM CP(geo). Mr Nicholson is a full time employee of Nicholson Geologist Pty Ltd and Technical Director of Global Geoscience Ltd and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (The JORC Code). Mr Nicholson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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