

Osino Provides Update on Pre-Feasibility Study Progress at Twin Hills Gold Project, Namibia

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Highlights

- Specialist technical studies towards the Twin Hills Pre-Feasibility Study ("PFS") being completed, based on a simple flowsheet of 3-stage crushing, gravity separation and carbon-in-leach ("CIL")
- Extensive met testwork, trade-off analyses, detailed cost estimation and surface infrastructure design underway or nearing completion
- Significant progress made with securing bulk grid power and mine water supply
- Surface rights acquisition advancing with 2 of 3 necessary government waivers secured
- 9 drill rigs currently active to complete additional infill & step-out drilling in addition to ~20,000m of drilling completed since 2022 Mineral Resource Estimate ("MRE") cut-off date (19 Feb 2022)
- Additional project improvement opportunities identified and in progress, namely:
 - potential conversion of Inferred to Indicated resources to allow for inclusion into the PFS
 - further processing plant refinements and capacity improvements
 - enhanced geological modelling to allow for selective mining
- Intended PFS release date has been updated to mid-Q3 2022 to capture this potential upside
- Investors are invited to participate in a live webinar today, 20 April 2022 at 11am ET (8am PT) at <https://attendee.gotowebinar.com/register/5857855327493794571>

VANCOUVER, British Columbia, April 20, 2022 -- [Osino Resources Corp.](#) (TSXV:OSI) (FSE:RSR1) (OTCQX:OSIIF) ("Osino" or "the Company") is pleased to provide an update on progress made with the various development studies underway towards a PFS on the Company's Twin Hills Gold Project ("Twin Hills" or the "Project") in Namibia.

Twin Hills is an orogenic-style, sedimentary-hosted, structurally controlled gold project contemplated as an open pit, which Osino is fast-tracking through development. Osino published a preliminary economic analysis ("PEA") on Twin Hills in August 2020 and is in the process of working towards a PFS on Twin Hills based on the recently published updated MRE.

Heye Daun, Osino's President & CEO commented: *"We have never been more excited about the Twin Hills gold project, and we believe that especially with the recent resource upgrade and the associated project optimization opportunities identified, Twin Hills is on its way to become one of Namibia's most significant gold projects. We have thus decided to give ourselves some additional time to fine-tune and grow the project scope to a higher production level than was previously planned. We are confident that Twin Hills' mineral resource endowment will continue to grow, and we have already commenced with Indicated resource conversion drilling at Clouds and Twin Hills West, and follow-up drilling of the recently discovered high-grade shoots at Twin Hills Central and Clouds. We are also planning additional down-dip step-outs along the spine of all of the deposits and we believe that once completed, all of this drilling should result in another significant resource upgrade."*

Drilling Update

Of the 186,826m of RC and DD drilling completed at Twin Hills since the discovery of the deposit approximately 167,597m was included in the recent MRE update up to the data cut-off date of 19 February 2022. Since then, more than 19,229m of additional RC and DD drilling was completed, and Osino expects to complete some additional infill and step-out drilling before the end of May 2022, aiming to convert more of the current Inferred resources to the Indicated category which would enable this material to be added to the PFS mine plan.

During March 2022 Osino also completed approximately 3,000m of grade control orientation drilling (12.5m x 12.5m drill spacing) at Twin Hills Central ("THC") aiming to better define the short-range variability of the THC mineralization. This grade control exercise may potentially enable more advanced geostatistical resource estimation techniques to be applied (uniform conditioning versus ordinary kriging) to the Twin Hills mineral resource. The aim of this exercise is to model the effects of selective mining with the aim of potentially improving the processing head grade.

Drilling is ongoing with 6 DD and 3 RC rigs. Assay results for most of this drilling are outstanding. It is expected that this drilling will be completed during May 2022 with all assays received within 4-6 weeks of completion of drilling.

Development Study Update

Several studies to complete the PFS are underway with many at an advanced stage. These studies include but are not limited to the following:

- Metallurgical Testwork and Trade-off Analyses
- Tailings Disposal Strategy & Design
- Process Plant & Engineering Design
- Infrastructure & Site Layout
- Securing Major Utilities (Water and Power)
- Geotech and Mine Planning
- Permitting

Lycopodium Minerals Canada Ltd ("Lycopodium") were retained by Osino with responsibility for the overall management of the Twin Hills Project PFS. This comprises study management, cost estimating, management of metallurgical testwork and coordination and preparation of the Technical Report.

Metallurgical Testwork Update

Metallurgical tests were conducted on composite core samples from various locations in the mineral deposit. The tests included sample characterisation including chemical and mineralogical analysis, fire assay by size fraction, bulk leach extractable gold tests and diagnostic leaches. After this, the following potential metallurgical process steps or control parameters were tested on each sample:

- Crushing and milling tests and development of milling curves
- Extended gravity recovery tests and modelling
- Grind size, CIL and oxygen pre-oxidation leach evaluation
- Lead nitrate and shear reactor/Aachen leach evaluation
- Whole leach, flotation and site water leach tests
- Oxygen uptake rate, cyanide detoxification and carbon loading tests

Several trade-off studies were carried out including:

- Modelling of alternative crushing and milling circuits
- Oxidation - oxygen/Aachen reactor versus lead nitrate addition
- Comparison of vacuum filtration versus pressure filtration of tailings
- Gravity/flotation gold recovery followed by leaching compared with the base-case gravity/CIL circuit
- Comparison of dry-stack tailings deposition versus conventional pumped slurry tailings disposal

The metallurgical testwork and comminution studies indicate that Twin Hills' mineralized material can be characterized as being moderately hard, with excellent amenability for conventional CIL processing. Optimization work completed since the PEA (especially pre-oxidation) has resulted in an improvement in the potential overall gold recovery from the 90.9% achieved in the PEA.

Process Plant and Engineering Design

The results of this testwork suggest that the optimal process flow sheet will comprise three-stage crushing

followed by ball milling. Gravity concentration will then be applied to a selected size fraction, with the gravity-recovered gold ("GRG") concentrate being processed in an intensive leach reactor followed by electrowinning.

GRG tailings will be recycled to mill classification and the hydro-cyclone overflow will report to pre-leach thickening and pre-oxidation. Thickener underflow will be pumped to a six-stage carbon-in-leach circuit. Gold will be eluted from loaded carbon with eluate being processed by electrowinning. Finally, electrowon gold from the intensive and main leach circuits will be combined and smelted to final product.

Tailings Disposal/Storage Strategy

The Company is conducting a trade-off study to determine the optimal Tailings Storage Facility ("TSF") strategy for the project. More specifically, a dry-stack tailings deposition strategy is being considered versus a more conventional system of pumped slurry tailings. Dry-stacked tailings deposition has obvious advantages in terms of lower water consumption and associated environmental benefits, although this comes at the cost of likely higher total Life-of-Mine ("LOM") capex.

However, owing to the modular deposition strategy which grows in line with production, not all of the capital expenditure has to be incurred upfront, with the flexibility to defer some of the dry-stack capital requirements until later years of the LOM.

With the expected ongoing growth in mineral resources and likely higher future processing plant throughput Osino expects the Twin Hills projects water demand to continue to grow. In the context of Namibia's generally constrained water supply situation, owing to its dry climate and seasonal rainfall variation, it is therefore important that the Company make every attempt to minimize the Project's unit water consumption. For this reason, dry-stack tailings is favoured despite its expected higher capital cost. A thorough trade-off analysis is underway to determine the most cost-effective and appropriate tailings deposition strategy for the project.

Site and Infrastructure Layout

The general site layout has remained largely unchanged as the individual infrastructure elements continue to take advantage of the flat lying terrain on the northern side of the pits.

To minimize haulage costs over the LOM, it is important to place the processing plant as close as possible to the centre of the various open pits, close to Bulge and THC, which will contribute most mineralized material. The offices and stores are laid out immediately to the north of this pit, and logistically adjacent to the main access route from the north. The power supply line linking with the planned Erongo substation is designed to enter the project area from the west to access the plant.

The base case dry-stacked tailings facility is positioned to the west of the plant and linked through fixed overland conveyor to a facility which is planned to be built in three phases. Grasshopper conveyors are expected to provide flexibility to the phasing approach to the disposal strategy for distribution of tailings.

Waste rock dump volumes have been created and appropriate footprints have been designated for the approximately 5km² area required for the projected waste volumes to a dump height of 40m. Engineered waste rock dump designs will be created following the updated mine schedule.

A graphic accompanying this announcement is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/d6c3f6b8-ac40-4d3f-8890-775b01736cae>

Grid Power Supply

The Twin Hills project is located in an infrastructure-dense area of Namibia, only 20 km from the existing substation and grid power supply to the neighbouring Navachab gold mine. Namibia's parastatal bulk power

utility, Nampower, also has plans to construct a new substation in Karibib (the Erongo substation) which will enable the supply of sufficient grid power to Osino's Twin Hills project and other consumers in the region.

In March 2022 Osino signed a power-supply agreement with Nampower for a 16MW grid connection to the planned Erongo substation. Depending on the final processing plant capacity, Twin Hills maximum power demand is expected to grow to approximately 20MW, and discussions with Nampower have commenced to amend the power-supply agreement to cater for the additional expected demand.

Under the terms of the contract the grid power supply is subject to a 36 to 48-month Nampower procurement and construction lead time from signature (i.e. from March 2022). Discussions are currently underway to shorten this procurement period. In addition, investigations are ongoing to procure contingency power sources to bridge any potential supply gaps. Osino expects to have the required power available when full production commences.

Osino has also engaged a local Namibian electrical engineering consultancy to assist in designing & procuring large-scale photovoltaic power supply in addition to grid power. Various attractive proposals have been received and are being investigated further.

Mine Water Supply

The Twin Hills project is located only 25km from the local town of Karibib, and the neighbouring Navachab Gold mine, both of which are supplied with bulk water by Namibia's water parastatal, Namwater, via pipeline from Swakoppoort dam. Supplies from this source are however limited due to seasonal rainfall.

Osino thus commissioned two specialist Namibian consultants, Knight Piesold and SLR Consulting, to carry out the necessary hydrological studies and drill programs to develop our own water sources for the Twin Hills project, based primarily on three sources:

1. Ground water abstraction from existing, nearby marble aquifers on a sustainable yield basis
2. The development of sand aquifers using ground weirs in the nearby, ephemeral Khan river system
3. Additional augmentation using piped water (effluent and fresh) from the nearby town of Karibib

A total of 40 hydrological assessment and water abstraction boreholes have been drilled within the Twin Hills mining area since 2019, with a demonstrated combined water yield of 168m³/hr or 1.49m m³/year. Total mine make-up water demand at an assumed 4.5mtpa processing capacity is approximately 1.5m m³/year which will be supplied from the boreholes indicated in green dots in Figure 2 below.

A graphic accompanying this announcement is available at
<https://www.globenewswire.com/NewsRoom/AttachmentNg/a7f71b3f-043f-41e5-9414-5984685b3dc0>

Further water will be obtained from pit dewatering and, thus mine water supply has been secured from ground water only. A new phase of borehole drilling of 17 positions is now underway in previously untested areas to explore additional aquifer potential (Figure 2 blue dots).

Additional technical studies are under way to develop additional water sources a) from developing ground weirs and associated Khan River sand aquifers and b) from piped bulk water from the local town of Karibib (untreated effluent water from the town of Karibib or fresh make-up water from Swakoppoort dam).

These additional waters sources are being developed to diversify the supply base and to allow for a planned further increase in processing plant capacity.

It is anticipated that these additional water sources could supply up to 30-40% of total mine water demand, depending on final processing plant production rate and TSF strategy chosen. Trade-off studies are underway to determine the optimal solution.

Geotech and Mine Planning

A phase two geotechnical drill program was completed during Q1 2022. This program consisted of four additional geotechnical assessment holes in the THC-Bulge pit and three holes in the previously untested Clouds pit, designed to provide a level of confidence to the pit design suitable for future work towards a Bankable Feasibility Study and to allow for the determination of mineral reserves as part of the upcoming PFS.

This geotechnical drilling plus the associated testwork and analysis was completed under the direction of SRK Consulting (Pty) Ltd. and has resulted in improved confidence and slightly steeper pit slopes in some areas of the Twin Hills pits.

Mine planning is currently underway to incorporate the upsized mineral resource and to reflect the improved metallurgical testwork results and design parameters in an updated mine plan. The mine planning objective is to maximize annual gold production and project NPV.

Once the additional Inferred mineral resources have been converted to Indicated status and all project planning assumptions have been confirmed, the mine plan will be updated accordingly.

Permitting Process and Environmental and Social Impact Assessment (ESIA)

Under Namibia's regulatory environment several steps are required toward approval of the mining license which the Company applied for in August 2021.

The most important of these steps are the completion and approval of the Environmental & Social Impact Assessment ("ESIA"), including public consultation, and the compilation of an Environmental Management Plan ("EMP"). Once these are approved, the Namibian Ministry of Environment, Fisheries and Tourism ("MEFT") issues an Environmental Clearance Certificate ("ECC") which is generally the precursor to the granting of a mining license by the Ministry of Mines & Energy ("MME").

There are a range of additional, secondary approvals, most of which are usually obtained subsequent to the granting of a mining license. There are no prescribed timelines, but mining licenses are commonly granted after the completion of the ESIA process.

The following tasks have been completed to-date:

- Project registration and baseline specialist study compilation (2021)
- Public participation meetings and stakeholder feedback documentation (2021)
- Public review of the ESIA and EMP (2022)
- Final submission of the ESIA and EMP to government for approval (2022)

The final step of the approval process is now underway as the completed ESIA is under review by the MEFT. The submission was accompanied by a successful presentation in March. No significant risks were identified and MEFT is expected to make a positive recommendation to issue an ECC within a reasonable time period, generally between three to six months of submission of the ESIA.

Live Webinar

Investors are invited to participate in a live webinar with Osino's management to discuss the significantly upsized resource, progress with development studies and the Company's plans to continue to grow and fast-track the project. There will be a Q&A period following the presentation.

Date: April 20, 2022 at 11am ET (8am PT)

Registration Link: <https://attendee.gotowebinar.com/register/5857855327493794571>

The presentation and webinar playback will be available on the Company's website following the webinar.

Qualified Person's Statement

David Underwood, BSc. (Hons) is Vice President Exploration of [Osino Resources Corp.](#) and has reviewed and approved the scientific and technical information in this news release and is a registered Professional Natural Scientist with the South African Council for Natural Scientific Professions (Pr. Sci. Nat. No.400323/11) and a Qualified Person for the purposes of National Instrument 43-101.

About Osino Resources

Osino is a Canadian gold exploration and development company focused on the development of our Twin Hills gold discovery in central Namibia. The Twin Hills Gold Project is at an advanced stage of exploration with various advanced development studies underway with the aim of fast-tracking the project.

Osino has a large ground position of approximately 6,700km² located within Namibia's prospective Damara sedimentary mineral belt, mostly in proximity to and along strike of the producing Navachab and Otjikoto Gold Mines. The Company is actively advancing a range of gold prospects and targets along the belt by utilizing a portfolio approach geared towards discovery, targeting gold mineralization that fits the broad orogenic gold model.

Our core projects are favorably located north and north-west of Namibia's capital city Windhoek. By virtue of their location, the projects benefit significantly from Namibia's well-established infrastructure with paved highways, railway, power and water in close proximity. Namibia is mining-friendly and lauded as one of the continent's most politically and socially stable jurisdictions.

Osino continues to evaluate new ground with a view to expanding our Namibian portfolio.

Further details are available on the Company's website at <https://osinoresources.com/>

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