### OSINO ANNOUNCES PEA RESULTS FOR TWIN HILLS GOLD PROJECT, NAMIBIA US\$377M AFTER-TAX NPV AND 38% IRR

The reader is cautioned that any reference to mineral resources or geological technical information about Osino's mineral properties is based on, excerpted from and expressly qualified by Osino's current technical report (the "Technical Report") which was prepared in accordance with NI 43-101 entitled, "Twin Hills Gold Project, Namibia, NI 43-101 Technical Report" signed May 10, 2021 dated effective April 1, 2021 by Anton Geldenhuys, MEng, MGSSA, PrSciNat #400313/04 of CSA Global South Africa (Pty) Ltd. and Graham Hetherington, BEng, MAusIMM #318140 of Lycopodium Minerals Africa, (Pty) Ltd. prepared for Osino Resources Corp. Accordingly, Osino recommends that the reader refer to and read the Technical Report in its entirety, a copy of which is available on SEDAR at www.sedar.com under Osino's issuer profile.

The results of the Company's preliminary economic assessment ("PEA") that are described herein is a preliminary technical and economic study of the potential viability of the Twin Hills Gold Project. It is preliminary in nature and includes Inferred Mineral Resources that are considered too speculative geologically to have economic considerations applied to them that would enable them to be categorized as Mineral Reserves. In particular, the reader is cautioned that Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability. There can be no assurance, and there is no certainty, that the preliminary economic assessment contained in the PEA results disclosed herein will be realized. Further exploration and evaluation work and appropriate studies are required before Osino will be in a position to estimate any mineralized material reserves or to provide any assurance of an economic development case.

The production target and forecast financial information referred to in this PEA are comprised of both Inferred Mineral Resources and Indicated Mineral Resources. Metallurgical recoveries have been based on test work data and costs have been estimated by independent consultants generally from budget quotations, factored estimates or cost data from similar operations/projects. Cost estimate accuracy for the PEA results described herein are in the order of  $\pm 35\%$ . A more specific description of the assumptions, qualifications, and basis for the results of the PEA are described below, and the key assumptions and economic parameters are set out in Table 2.

### PEA Highlights

- 15-year Life-of-Mine ("LOM") and 3.5 million tonnes per annum ("mtpa") processing capacity.
- LOM gold recovery of 90.9% utilising conventional 3-stage crushing/ball milling and carbon-in-leach processing layout.
- Average annual gold production for years two to six of 124,000 ounces per year at an average operating cost of US\$827/oz produced. Average LOM gold production of 99,000 ounces per annum.
- Pre-production capital cost estimate of US\$176 million plus US\$26m contingency (15%).
- Cumulative LOM net cash flow of US\$858 million (pre-tax) and US\$560 million (after-tax).
- <u>Net Present Value ("NPV") of US\$579 million (pre-tax) and US\$377 million (after-tax) at a 5% discount</u> rate with a respective after-tax payback period of 2.3 years and internal rate of return ("IRR") of 38%, using a base gold price of US\$1,700/oz.
- PEA based on the previously reported Mineral Resource block model from the Technical Report, using a cut-off grade of 0.3 g/t Au, resulting in an Indicated Mineral Resource of 14.0 million tonnes ("Mt") at 0.98 g/t Au and an Inferred Mineral Resource of 46.2 Mt at 1.02 g/t Au, derived from 69,000m of drilling.



- An additional 31,987 m of infill and expansion drilling has been completed at Twin Hills since the April 1, 2021 effective date of the Technical Report, but has not been included in the PEA. This will be included in subsequent updates of the Mineral Resource once the drill program has been completed and all corresponding assay results have been received.
- Ongoing infill, resource expansion and brownfields exploration drilling with 10 drill rigs, in addition to
  ongoing project optimization, is likely to result in improved production parameters and economic
  outcomes to be published as part of the feasibility study which is expected to be completed during H1
  of 2022.

Vancouver, British Columbia, July 14, 2021 – Osino Resources Corp. (**TSXV:OSI**) (**FSE:RSR1**) (**OTCQB:OSIIF**) ("**Osino**" or "**the Company**") is pleased to announce the results of the preliminary economic assessment ("**PEA**") for Osino's Twin Hills Gold Project ("**Twin Hills**" or the "**Project**"), which is located in central Namibia and is rapidly being advanced through accelerated exploration drilling and fast-tracked development studies.

The PEA was prepared by Lycopodium Minerals Africa (Pty) Ltd. ("Lycopodium") in accordance with National Instrument 43-101—*Standards of Disclosure for Mineral Projects* ("NI 43-101") and contemplates a low-risk, technically simple open-pit mine utilizing contract mining and feeding a conventional carbon-in-leach ("CIL") metallurgical plant processing 3.5 million tonnes of mineralized material per annum ("mtpa").

**Heye Daun, Osino's co-founder and President & CEO commented:** "We are very pleased with the results of this PEA which demonstrates that Twin Hills is what we always said it would be, namely a simple, economically robust and attractive open pit gold project with significant upside. It is geologically consistent, metallurgically simple and technically low risk with a low capital intensity and significant future upside. We are proud to have been able to deliver this PEA within less than 2 years of discovery and our vision for the next 2 years is to unlock its true upside potential and to advance the project to the construction stage."

#### **PEA Overview and Financial Analysis**

The Twin Hills Gold Project is located within Namibia's prospective Damara sedimentary mineral belt, in proximity to and along strike of the producing, open-pit Navachab and Otjikoto gold mines. Twin Hills is a sedimentary-hosted, structurally controlled gold deposit that fits the broad orogenic model and is amenable to conventional open-pit gold mining and carbon-in-leach metallurgical processing.

The table below summarizes the results and key valuation metrics of the PEA on a pre- and post-tax basis.

		US\$1	700/oz	US\$1	.850/oz
	Units	Pre-Tax	Post-Tax	Pre-Tax	Post-Tax
NPV <sub>5%</sub>	US\$m	579	377	724	467
IRR	%	45%	38%	53%	44%
Payback	Years	2.2	2.3	1.9	2.1
LOM Cashflow	US\$m	858	560	1260	1058

#### Table 1: Preliminary Economic Assessment Summary

The financial model was completed on a 100% project basis and includes a 3% gross royalty and 1% export levy to the Namibian government. The economic analysis carried out for the Project uses a cash flow model at a base gold price of \$1,700 per ounce gold and a 5% discount rate.

The financial assessment of the Project was carried out on a 100% equity basis, not accounting for potential sources of funding which may include debt. No provisions were made for the effects of inflation, and Osino's understanding of current Namibian tax regulations were applied to assess the tax liabilities.

Figures 1 to 4 below summarize the LOM production schedule and key production metrics.

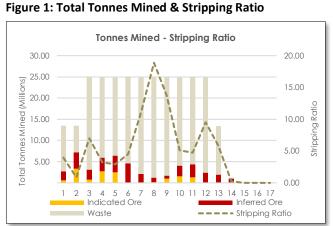


Figure 2: Annual and Cumulative Gold Production

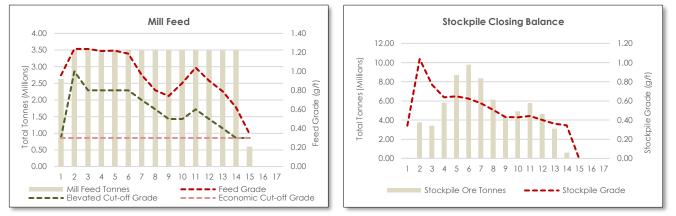


SING

RESOURCES



#### Figure 4: Stockpile Balance



A summary of the production schedule in tabulated format and cash flow model with key economic results can be viewed in Table 8 below:

It should be noted that there is scope for significant optimization and improvement to the mine design and production schedule which will be reflected together with an updated Mineral Resource in the next technical assessment of the project.

The key operating assumptions and economic parameters used in the PEA are tabulated below:

### OSINO RESOURCES

#### **Table 2: Key Assumptions and Economic Parameters**

Units	Amount
Years	15
US\$/oz	1700
%	5,0%
%	3,5%
%	90,9%
%	3,0%
%	1,0%
Unite	A inc a cost
	Amount
	48,7
000 000 t	243,2
(000 000 +	5,0 48,7
-	0,98
	1 390
	99
1000 oz per annum	124
Units	Amount
US\$/oz	0.55
US\$/oz	2.20
US\$/t	2.25
US\$/t	2.05
US\$/t	8.97
US\$/t US\$/t	8.97 3.00
US\$/t	3.00
US\$/t Units	
US\$/t Units US\$/oz	3.00 Amount 857
US\$/t Units US\$/oz US\$/oz	3.00 Amount
US\$/t Units US\$/oz	3.00 Amount 857
US\$/t Units US\$/oz US\$/oz US\$/oz	3.00 Amount 857 928 945
US\$/t Units US\$/oz US\$/oz US\$/oz US\$/oz	3.00 Amount 857 928 945 Amount
US\$/t Units US\$/oz US\$/oz US\$/oz US\$/oz US\$/oz	3.00 Amount 857 928 945 Amount 176
US\$/t Units US\$/oz US\$/oz US\$/oz US\$/oz US\$/oz US\$/oz	3.00 Amount 857 928 945 Amount 176 26
US\$/t Units US\$/oz US\$/oz US\$/oz US\$/oz US\$/oz	3.00 Amount 857 928 945 Amount 176
	US\$/oz % % % % % % Units '000 000 t '000 000 t '000 000 t g/t '000 000 t g/t '000 oz '000 oz per annum '000 oz per annum '000 oz per annum '000 oz per annum

#### Notes:

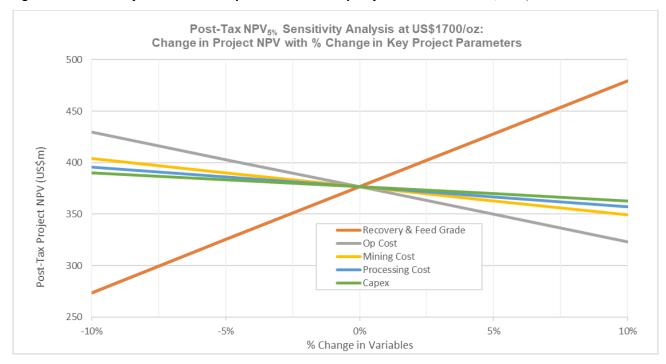
- 1. Mining, processing plus on-site G&A.
- 2. Operating costs plus selling costs, royalties & levies.
- 3. Cash costs plus sustaining capital (excl. closure costs & salvage value).

#### **Sensitivity Analysis**

An after-tax sensitivity analysis to the key project variables was carried out which indicates that the project is most sensitive to a change in grade or gold recovery, as indicated by the orange line in the diagram below.

# OSINO

RESOURCES



#### Figure 5: Post-Tax Project NPV Sensitivity to Variations in Key Project Parameters at US\$1700/oz

#### Table 3: Two-factor Post-Tax Project NPV Sensitivity Analysis

Grade	Post-Tax N	PV <sub>5%</sub> Sensitivity	– Mineraliz	ed Material	Grade & Gol	d Price		
g/t		1400	1500	1600	1700	1800	1900	2000
0,88	-10,0%	108	163	218	274	328	383	437
0,93	-5,0%	151	209	267	325	383	440	497
0,98	0,0%	194	255	316	377	437	497	558
1,03	5,0%	237	301	364	428	491	555	618
1,08	10,0%	279	346	413	479	545	612	678

Recovery	Post	-Tax NPV <sub>5%</sub> Sei	nsitivity - Re	covery & Go	ld Price			
%		1400	1500	1600	1700	1800	1900	2000
82%	-10,0%	108	163	218	274	328	383	437
86%	-5,0%	151	209	267	325	383	440	497
91%	0,0%	194	255	316	377	437	497	558
95%	5,0%	237	301	364	428	491	555	618
100%	10,0%	279	346	413	479	545	612	678
Cash Cost	Post	-Tax NPV <sub>5%</sub> Sei	nsitivity - Ca	sh Cost & Go	old Price			
US\$/oz	\$377	1400	1500	1600	1700	1800	1900	2000
771	-10,0%	248	309	369	430	490	551	611
814	-5,0%	221	282	343	403	464	524	584
857	0,0%	194	255	316	377	437	497	558
900	5,0%	167	228	289	350	410	471	531
943	10,0%	140	201	262	323	384	444	505

## OSINO

RESOURCES

Capex	Post	-Tax NPV <sub>5%</sub> Sei	nsitivity - Ca	pex & Gold P	rice			
US\$m	\$377	1400	1500	1600	1700	1800	1900	2000
182	-10,0%	208	269	330	390	450	511	571
192	-5,0%	201	262	323	383	444	504	564
202	0,0%	194	255	316	377	437	497	558
212	5,0%	187	248	309	370	430	491	551
222	10,0%	180	241	302	363	424	484	544

#### **Mineral Resources**

The Mineral Resource was estimated for the Twin Hills Project which includes three sub-areas, namely Bulge, Twin Hills Central, and Clouds. The Mineral Resource, previously reported effective 01 April 2021, has been updated using a lower reporting cut-off grade of 0.3 g/t Au (previously 0.5 g/t Au). The lower reporting cut-off is as a result of economic viability at 0.3 g/t Au which was demonstrated during the PEA.

There has been no update of the geological nor mineralisation interpretations (wireframes), nor the estimate of gold grade in the block model. This Mineral Resource update is merely a restatement of the Mineral Resource using the same block model (as used in April 2021) at a 0.3 g/t Au cut-off.

A total of 69,063 m of drilling from 339 holes (34,957 m of diamond core from 125 holes and 34,105 m of RC from 214 holes) was completed at Twin Hills up until January 2021. Assays were available for 61,975 m of this drilling at the end of March 2021, and this data were used to support the maiden Mineral Resource, effective 1 April 2021. The PEA then commenced, using the maiden Mineral Resource as an input. At the same time, an infill drill program of approximately 58,000 m was being carried out and is still in progress. Of the 58,000 planned metres, approximately 34,800 m have been drilled, with 23,200 m yet to be drilled. The infill drill program will be included in future updates of the Mineral Resource.

A Mineral Resource is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade or quality and quantity that there are reasonable prospects for eventual economic extraction (RPEEE). To satisfy the requirement of RPEEE by open pit mining, reporting pit shells were determined based on conceptual parameters and costs. Gold recovery will be achieved using a conventional crushing, milling, gravity, pre-oxidation and carbon-in-leach (CIL) circuit.

Material within the reporting pit shell was classified according to Mineral Resource confidence categories defined in CIM Definition Standards for Mineral Resources and Mineral Reserves. Data quality and quantity, geological and grade continuity, and confidence in the grade and density estimates, were considered when classifying the Mineral Resource. Mineral Resources are classified as either Inferred or Indicated. Indicated Mineral Resources have generally been classified where the mineralization is wide, suggesting good geological and grade continuity, and drill spacing is less than the general 50 m x 40 m grid.

The Mineral Resource is that material within the conceptual RPEEE pit shell above a 0.3 g/t Au cut-off grade. The Mineral Resource has an effective date of 01 July 2021 (due to the application of a revised reporting cut-off grade), but only considers the drilling and assaying which has been completed until March 2021.

# OSINO

RESOURCES

Mineral Resource Category	Tonnes (Mt)	Grade (g/t Au)	Troy Ounces (Moz)	Bulk Density (t/m³)
Indicated	14.0	0.98	0.44	2.75
Inferred	46.2	1.02	1.52	2.75

#### Table 4: Mineral Resource for the Twin Hills Gold Project at a 0.3 g/t Au Cut-off as of 01 July 2021

#### Notes:

1. Figures have been rounded to the appropriate level of precision for the reporting of Mineral Resources.

2. Mineral Resources are stated as in situ dry tonnes; figures are reported in metric tonnes.

3. The Mineral Resource has been classified under the guidelines of the CIM Definition Standards for Mineral Resources and Mineral Reserves and adopted by the CIM Council, and procedures for classifying the reported Mineral Resources were undertaken within the context of the Canadian Securities Administrators under NI 43-101.

4. The Mineral Resource is reported within a conceptual pit shell determined using a gold price of US\$1,700/oz and conceptual parameters and costs to support assumptions relating to reasonable prospects for eventual economic extraction.

a. 4% royalty (3% government royalty and 1% export levy)

- b. Selling costs of US\$2.75/oz
- c. Mining costs of US\$2.00/t mineralized material and US\$1.85/t waste, with additional cost attributed to depth below surface
- d. Processing and rehandling costs of US\$8.15/t run of mine mineralized material
- e. G&A cost of US\$4.00/t run of mine mineralized material
- *f.* Slope angle of 48° in weathered rock and 55° in fresh rock
- g. 90% gold recovery from CIL circuit
- 5. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
- 6. The exclusive exploration licenses constituting the Twin Hills Project are owned 80%, 90% and 95% respectively by Osino. The total reported gold ounces attributable to Osino Resources is 93.05%.

The estimated block model was tabulated at various cut-off grades. This tabulation does not represent a Mineral Resource in any way and only serves to illustrate the nature of the mineralization and sensitivity to various cut-offs.

Cut-off		Indicated			Inferred	
Grade (g/t Au)	Tonnes (Mt)	Grade (g/t Au)	Troy ounces (Moz)	Tonnes (Mt)	Grade (g/t Au)	Troy ounces (Moz)
0.3	14.0	0.98	0.44	46.2	1.02	1.52
0.4	13.7	0.99	0.44	43.8	1.06	1.49
0.5	13.5	1.00	0.43	42.6	1.08	1.47
0.6	12.8	1.02	0.42	40.6	1.10	1.44
0.7	11.2	1.08	0.39	36.2	1.16	1.35
0.8	9.3	1.14	0.34	30.4	1.23	1.21
0.9	7.3	1.22	0.29	24.9	1.32	1.05
1.0	5.4	1.32	0.23	19.7	1.42	0.90

#### Table 5: Classified Block Model within the Conceptual RPEEE Pit Shell at Various Cut-off Grades

#### **Mine Design and Production Schedule**

Tables 6 and 7 below summarizes the key mine design parameters and LOM production schedule. Note that a new pit design was created using costs and optimisation parameters generated by the PEA work. These costs are different to the costs used for the RPEEE pit shell which was generated for the maiden Mineral Resource as described in the April Technical Report.

Parameter	Unit	Value
Minimum mining width (20 m + Single Ramp Width)	m	35
Minimum pushback width	m	60
Dual ramp width	m	25
Single ramp width	m	18
Minimum turning circle	М	10
Ramp Gradient (short and long ramps)	%	8 to 10
Bench Height	М	10
Bench Batter Angle	Deg	70
Berm Width	М	4.20
Max Benches per Stack	#	5
Stack angle - Crest to Toe – Fresh Rock	Deg	50
Stack Berm Width	м	15

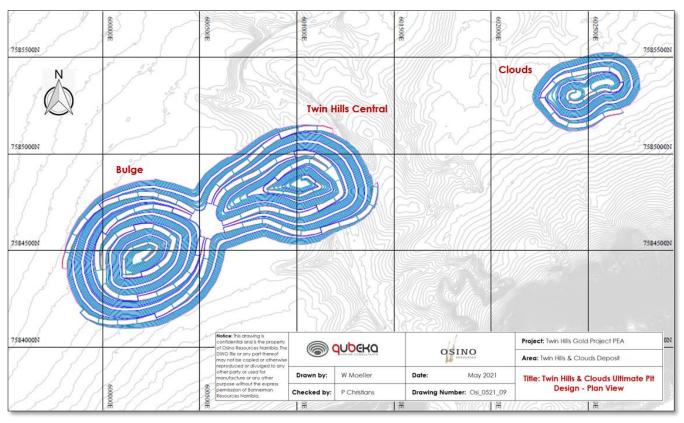
#### Table 6: Twin Hills Pit & Geotechnical Slope Design Parameters

At steady state approximately 23 haul trucks (100-t) would be required with two shovels for selective loading whilst for bulk loading a maximum of five units would be required.

	Units	Total/Avg.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Mining																	
Ore - Oxide	kt	1 524	1 114	98	74	8	44	109	78								
Ore - Transitional	kt	5 238	1 586	1 840	510	80	69	574	240	275			64				
Ore - Fresh	kt	41 957	12	5 243	2 559	5 816	6 279	3 888	1 766	983	1 696	4 090	4 301	2 378	1 967	980	
Ore Tonnes Mined	kt	48 719	2 711	7 181	3 143	5 904	6 391	4 571	2 084	1 258	1 696	4 090	4 365	2 378	1 967	980	
Ore Grade Mined <sup>1</sup>	g/t	0,98	0,94	1,14	0,97	0,90	0,97	1,01	1,00	0,86	0,81	0,81	0,94	1,04	1,03	1,28	
Waste Tonnes Mined	kt	243 173	10 794	6 324	21 928	19 098	18 612	20 432	22 987	23 745	23 307	20 912	20 706	22 625	11 460	245	
Total Tonnes Mined	kt	291 892	13 505	13 505	25 071	25 002	25 002	25 002	25 071	25 002	25 002	25 002	25 071	25 002	13 427	1 225	
Strip Ratio		5,0	4,0	0,9	7,0	3,2	2,9	4,5	11,0	18,9	13,7	5,1	4,7	9,5	5,8	0,2	
Stockpile Balance	kt		86	3 767	3 410	5 815	8 706	9 777	8 360	6 118	4 314	4 904	5 769	4 647	3 114	594	
Stockpile Grade	g/t		0,34	1,04	0,77	0,64	0,65	0,62	0,57	0,50	0,43	0,43	0,44	0,40	0,36	0,34	
Processing																	
Plant Feed	kt	48 719	2 625	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	3 500	594
Feed Grade	g/t	0,98	0,96	1,24	1,24	1,21	1,22	1,19	0,96	0,80	0,74	0,88	1,04	0,90	0,79	0,62	0,34
Au Produced	koz	1 390	75	126	126	124	124	121	98	82	76	90	106	92	81	64	6

#### Table 7: LOM Production Schedule

### OSINO RESOURCES



### Figure 6: Detailed Mine Design Planview for Bulge, Twin Hills Central and Clouds Pits

Figure 7: Pit Dimensions and Isometric View for Bulge, Twin Hills Central and Clouds Pits

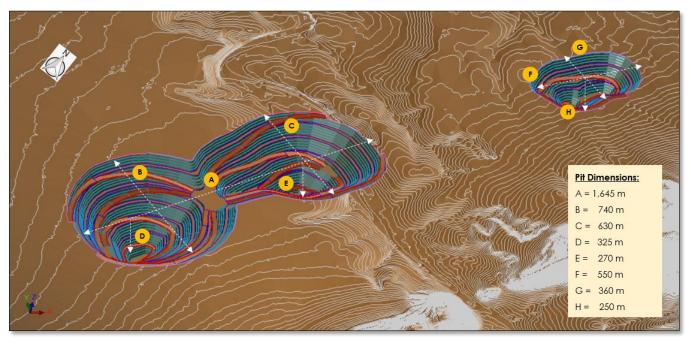


Table 8: LOM Production Schedule (next page)

	Units	Total/Avg.	0	1	2	'n	4	S	9	7	∞	6	10	11	12	13	14	15	16	17
Mining																				
Ore - Oxide	ъt	1524		1114	98	74	8	44	109	78										
Ore - Transitional	Ł۲	5 238			1 840	510	80	69	574	240	275			64						
Ore - Fresh	кt	41 957			5 243	2 559 5	5 816 6	6 279 3	3 888 1	1 766	983	1 696	4 090	4 301	2 378	1 967	980			
Ore Tonnes Mined	ᅶ	48 719		2 711	7 181 3	3 143 5	5 904 6	6 391 4	4571 2	2 084 1	1 258 3	1 696	4 090	4 365	2 378	1 967	980			
Ore Grade Mined <sup>1</sup>	g/t	0,98			1,14	0,97	06'0	0,97	1,01	1,00	0,86	0,81	0,81	0,94	1,04	1,03	1,28			
Waste Tonnes Mined	кt	243 173	Ч		6 324 2:	21 928 15	19 098 18	18 612 20	20 432 22	22 987 23	23 745 23	23 307 2	20 912 2	20 706 2	22 625 1	11 460	245			
Total Tonnes Mined	보	291 892	Ч		13 505 25	25 071 25	25 002 25	25 002 25	25 002 25	25 071 25	25 002 25	25 002 2	25 002 2	25 071 2	25 002 1	13 427	1 225			
Strip Ratio		5,0		4,0	6'0	7,0	3,2	2,9	4,5	11,0	18,9	13,7	5,1	4,7	9,5	5,8	0,2			
Stockpile Balance	¥				3 767 3	3 410 5	5 815 8	8 706 5	9 777 8	8 360 6	6 118 4	4 314		5 769	4 647	3 114	594			
Stockpile Grade	g/t			0,34	1,04	0,77		0,65		0,57	0,50	0,43	0,43	0,44	0,40	0,36	0,34			
Processing																				
Plant Feed	kt	48 719			3 500	3 500 3	3 500 3	3 500 3	3 500 3	3 500 3	3 500	3 500	3 500	3 500	3 500	3 500	3 500	594		
Feed Grade	g/t	0,98		0,96	1,24			1,22	1,19	0,96	0,80		0,88	1,04	06'0	0,79	0,62	0,34		
Au Produced	koz	1 390		75	126	126	124	124	121		82	76	06	106	92	81	64	9		
Revenue																				
Gold Price	US\$/oz	1700		1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700	1700		
Gold Sales <sup>2</sup>	US\$m	2 388		127	215	215					139	129	153	180	157	137	108	10		25
Royalty & Export Levy <sup>3</sup>	US\$m	(95)		(5)	(6)	(6)	(8)	(8)	(8)	(2)	(9)	(2)	(9)	(2)	(9)	(2)	(4)	(0)		
Selling & Marketing Costs	US\$m	(4)		(0,2)	(0,3)	(0,3)	(0,3)	(0,3)	(0,3)	(0,3)	(0,2)	(0,2)	(0,2)	(0,3)	(0,3)	(0,2)	(0,2)	(0,0)		
<b>Operating Costs</b>																				
Mining	US\$m	(608)		(28)	(29)	(52)	(52)	(53)	(52)	(52)	(52)	(52)	(52)	(52)	(52)	(28)	(3)			
Processing	US\$m	(437)		(24)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(31)	(5)		
Administration / Fixed / G&A	US\$m	(146)		(8)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(11)	(2)		
Total Cash Operating Cost	US\$m	(1 191)		(09)	(71)	(94)	(94)	(94)	(94)	(94)	(63)	(63)	(94)	(94)	(94)	(20)	(45)	(2)		I
Unit Costs																				
Cash Operating Cost	US\$/oz	(857)		(801)	(562)	(744) (	(762) (	(160) (	(176) (	(953) (1	(1 144) (1	(1 235) (1	(1 047)	(887) (1	(1 016)	(864)	(702) (:	(1 195)		
All-in Sustaining Cost	uS\$/oz	(945)		(817)	(573)	(759) (	(777)	(775) (	(161)	(972) (1	(1 167) (1	(1 260) (1	(1 068)	(305) (1	(1 037)	(882)	(716) (:	(1 218)		
Capital Expenditure																				
Project Capex (excl. contingency) <sup>4</sup>	US\$m	(176)	(176)																	
Contingency @ 15%	US\$m	(26)	(26)																	
Sustaining Capex (incl. closure) <sup>5</sup>	US\$m	(39)		(1)	(1)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(1)	(1)	(5) (:	(10)	
Tax Paid	US\$m	(298)			(2)	(15)	(39)	(39)	(37)	(24)	(13)	(10)	(18)	(28)	(20)	(22)	(21)			(8)
Cash Flow																				
Net Free Cash Flow before Tax	US\$m	858	(202)	61	133	110	106	106	102	65	38	28	50	77	55	60	58			25
Net Free Cash Flow after Tax	US\$m	560	(202)	61	131	95	67	67	64	41	24	18	32	49	35	38	37			17
Discount Factor			1,00	0,95	0,91	0,86	0,82	0,78	0,75	0,71	0,68	0,64	0,61	0,58	0,56	0,53	0,51			0,44
Discounted Cashflow before Tax (5%)	US\$m	579	(202)	58	121	95	87	83	76	46	26	18	31	45	30	32	29			11
Discounted Cash Flow after Tax (5%)	US\$m	377	(202)	58	119	82	55	53	48	29	16	12	20	28	19	20	18	(1)	(5)	2
Notes:																				
1. Mining dilution of 5% and ore loss of 3.5% has been applied to the ore tonnes	of 3.5% ha	s been applied	the ore to	nnes																
<ol> <li>Namibian government royalty (3%) and export levy (1%)</li> </ol>	and expor	t levy (1%)																		
3. US\$25m salvage value accounted for as income	or as incor	ne 'Em continecone	, (1 E 0/ )hiv	th ic inclu	dad in the		- indexe													
4. The project capes of 0.001 for excludes 0.9520m contingenty (1.2%) which is included in the cashinow analysis	réco sann	ting contingent.		HI IS INCIU			/ dildiysis													
5. Sustaining capital is esumated at 2% of operating cost pius USATSM in esumated closure costs	o or opera	ung cost pius u	sə ni melçe	umated c	losure co.	515														

RESOURCES

OSINO

#### Metallurgical Testwork

In 2020, Lycopodium was commissioned to manage a metallurgical test work program, undertaken by Maelgwyn, as part of a PEA. Test work was completed in June 2021 including the following test work:

- Gravity recoverable gold testwork
- Grind vs recovery testwork
- Leach tests (with and without carbon)
- Preliminary heap leach investigation
- Leach kinetics testwork

Leach test work was conducted under the following conditions:

- 50% solids
- Target grind of 80% passing 75μm
- 1kg/t cyanide addition
- 24-hour leach time
- 20g/l carbon addition in the tests with carbon

Results from the first phase of test work indicated positive leach recoveries with pre-oxidation ranging from 84.2% to 90.1% at a grind size of 80% passing 75 $\mu$ m. Whilst these results were encouraging, and indicated the potential for a conventional leach circuit, it was decided to do a further Phase of testwork.

This Phase 3 test work was recently completed and confirms the benefit of pre-oxidation, with an average increase in gold recovery of approximately 10% for the fresh samples and 4% for the oxide samples at a grind size of 80% passing 75µm.

At a finer grind of 80% passing 53µm there was an average increase in gold recovery across all mineralized material types of about 5.3% compared to a grind size of 80% passing 75µm.

Average gold recovery results from samples at a grind size of 80% passing 53µm with pre-oxidation at different leach times were thus as follows:

#### Table 9: Gold Recovery Results at different Leach times

Leach Retention Time	24 Hour	48 Hour
Fresh Rock Sample	89.2%	90.7%
Oxide Rock Sample	92.1%	93.9%

Other process parameters are as follows:

- Comminution test work indicated that mineralized material is considered "medium to hard" with 3-stage crushing, followed by ball milling the likely optimal comminution configuration.
- Average comminution circuit power consumption estimated to be 14.9 kWh/t for 80% passing 75µm but increasing to circa 17.1kWh/t for the 80% passing 53µm grind.
- Initial gravity recovery test results were promising but not definitive.

The recovery used in the financial model is 90.9% which is the average recovery for all material types, believed to be achievable with the 80% passing 53um grind at 48 hours leach time. As this modified grind size was a later

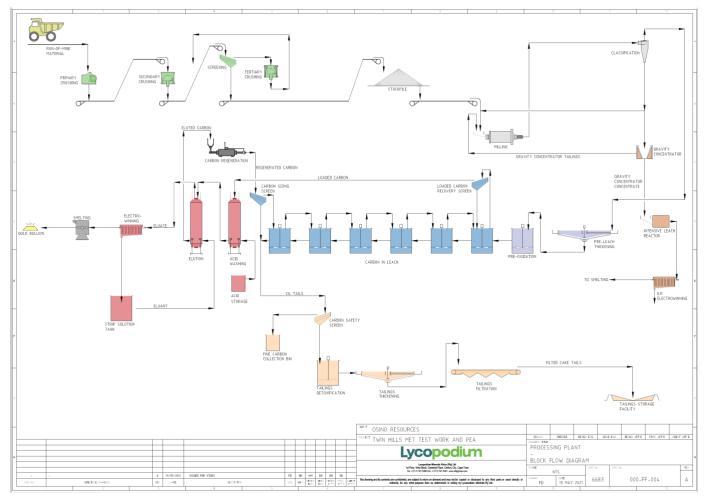


optimised step in the leach testwork program, the processing cost and the capital costs reflect the original calculations at 80% passing 75um grind size. The next phase of test work is being designed to confirm 80% passing 53µm is the optimal grind size, as well as updating the associated costs.

Heap leach test work was inconclusive as the samples were not coarse enough for standard size ranges, with particles in the region of 25 mm diameter. Bottle roll tests were therefore conducted on 90% passing 10mm and 80% passing 5mm. The results showed some leaching occurring and follow-up heap leach testwork at standard size ranges is currently underway.

#### **Plant Mineral Processing**

Gold recovery will be achieved using a conventional crushing, milling, gravity, pre-oxidation and carbon-in-leach ("CIL") process plant flowsheet which is based on conventional unit operations well proven in the industry and will achieve high recoveries from all major rock types that are planned to be processed. The plant flow diagram is depicted in Figure 8 below.



#### Figure 8: Twin Hills Gold Project Process Plant Flow Diagram

Comminution will consist of three-stage crushing and ball milling. A bleed stream taken from the mill cyclone underflow will be processed in a gravity recovery circuit, followed by intensive leach of gravity concentrate.

The mill cyclone overflow product stream will be processed via a CIL circuit, carbon elution, electrowinning and a gold room. CIL tails will be treated to achieve cyanide destruction before being pumped to the tailing's thickener, with the underflow being filtered. Filter cake will be conveyed and disposed of as tails in the tailings storage facility ("TSF").

OSINO

RESOURCES

The key project design criteria for processing are:

- Nominal throughput of 3.5 million tonnes per annum
- Crushing plant availability of 70% and
- Plant availability of 91.3% overall, downstream of crushing
- 3-stage crushing and ball milling
- Cyclone classification to produce a leach feed with a grind size of 80% passing 75µm
- Gravity concentration on a portion of the cyclone underflow
- In-line leaching and electrowinning
- Pre-leach thickening (the classification cyclone overflow is expected to be fairly dilute)
- Pre-oxidation
- CIL leaching (preferred to leach/CIP in order to mitigate the risk of preg-robbing material in the mineralized material deposit)
- Elution, electrowinning and gold smelting to produce a dore bar
- Tailing's detoxification to neutralise any cyanide that may be sent to the TSF and negate any environmental contamination.

Tailings storage is envisaged to occur via dry stack tailings deposition through co-disposal with waste rock after tailings thickening and filtration. This is recommended to recover the maximum amount of water from the tailings and return it to the process and will thus result in a lower water consumption than conventional tailings deposition.

The metallurgical and mineralized material processing studies have demonstrated the Project to be viable and attractive for development.

#### Site Location and Infrastructure

The Twin Hills Project is in central Namibia approximately 20km's from the local town of Karibib, and 150 km from the capital city, Windhoek. The Project area has access to excellent infrastructure by being in close proximity to Namibia's well-maintained national rail, road and bulk utilities network.

The Project is located within 5km's of the sealed national highway network, within 20km's of a major high tension overhead power line and within 220km's of the modern seaport of Walvis Bay, to the west of the Project, which is the main logistical port suppling the mining industry in the region. The Project is also within 30km's of the well-established Navachab gold mine, which has been in consistent production since 1989.

The anticipated infrastructure for the Project includes mine dry facilities, equipment maintenance workshop, refuelling facilities, explosive magazine, office administration facilities, assay laboratory, and warehouse facilities. As well as access roads, stockpiling areas, storm water handling facilities, water supply, power supply network, diesel generators, sewage treatment plant, and waste management facilities. Given the Project's proximity to the town of Karibib, it is assumed that no onsite accommodations will be required. Accommodations for expatriate and some senior staff may be provided through rental houses in the town of Karibib.



The Project power demand has been estimated at 15MW, which will be supplied from the Namibian grid by a high-voltage overhead powerline to the site switchyard. The national grid connects to the town of Karibib with a 66kV line, which also supplies the Navachab gold mine. Osino has recently made an application to the national power utility to connect the planned operation into the high voltage power grid.

The Project is located in arid shrub land and is characterised by moderate relief with local elevations ranging from 900 m to 1,500 m above sea level. The primary economic activities in the Project area are agricultural (cattle ranching and game farming). Local elevations or hills in the Project area are generally associated with marble outcrops and granitic intrusions.

Various site visits by the Project team have been conducted in early 2021 in conjunction with preliminary civil engineering investigations which have found that the site is characterised by:

- Flat topography providing space for the placement of mine infrastructure around the proposed pits.
- An extensive calcrete horizon which provides a stable foundation for equipment.
- The calcrete is overlain by a veneer of Kalahari sands 1 to 2m deep in the western area of the Project.

Field investigations have informed the PEA site layout with alternative options for plant, waste dumps and tailings facility. A strategy of centralising the plant and waste areas to the northwest of the Twin Hills main pit has resulted in a robust infrastructure layout which is now believed to be near optimal for the Project, with detailed layout to be completed during the next stage of feasibility study.

Refer to Figure 9 below for the detailed site layout.

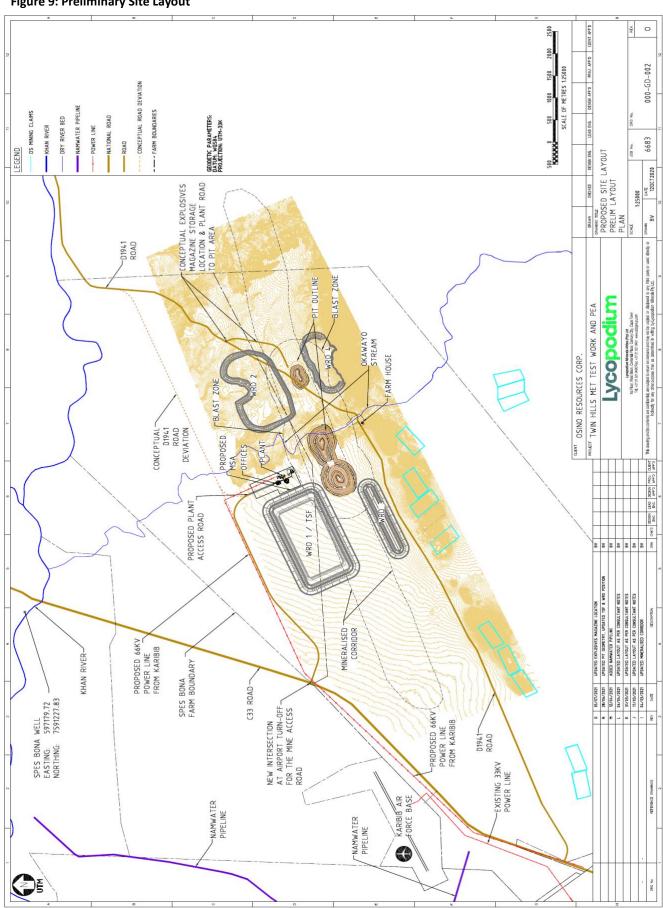
#### Water Supply

The Project area rainfall and evaporation rates determined from records at Karibib, show the average annual rainfall as 217 mm, while the evaporation is 2,242 mm/yr. Rainfall occurs almost exclusively from December through April, with occasional showers in November. Several mostly ephemeral watercourses flow across the Project site to meet the Khan River to the north.

The process design aims to maximise the re-use of water by recycling process solutions wherever possible through filtration systems in the plant. Some water is inevitably lost to tailings and through evaporation and it is envisaged that the 3.5mtpa plant will require ~1.5 million m3pa. This deficit will be made up from raw water derived from mine dewatering as well as water supply boreholes.

Borehole drilling has identified significant aquifers in the marble horizons and pump testing is ongoing to determine the sustainable yields of these holes. Surface water may be required to supplement groundwater to meet the Project water balance demands, and potential dam sites within sand aquifers are being considered along the Khan River to the north of the Project site as supplementary water storage potential.

An application has also been made to Namwater to supply any possible shortfall in supply with bulk raw water from the Swakoppoort Dam's existing pipeline connection with Karibib, which also supplies the Navachab Mine.



#### **Figure 9: Preliminary Site Layout**

#### RESOURCES





#### **Environmental and CSR**

An independent environmental consultancy in Namibia has been appointed to undertake the environmental permitting aspects of the Twin Hills project. Environmental and Social Impact Assessment ("ESIA") was commissioned to evaluate the impacts arising from the Project, in fulfilment of the environmental and social requirements set out in Namibian legislation as well as international standards and guidelines.

Baseline studies for the Project area are targeting biotic and abiotic factors relating the Project and the findings of scoping specialist studies as well as issues and concerns raised at stakeholder and public meetings planned to be held in Q3 2021 will be presented in the ESIA report in October 2021.

During the PEA scoping study, none of the impacts identified are considered as fatal flaws and any high significance impacts will be reduced after implementation of mitigation measures.

#### Capital & Operating Costs

The Project capital cost estimate was compiled by Lycopodium for a plant targeting a grind size of 80% passing 75µm, and further work is required to determine the change in treatment plant capital associated with 80% passing 53um grind. Additional input was sourced from specialists Prime Resources (Pty) Ltd. on the tailing storage facility and Osino have provided project specific portions for mine establishment and associated facilities including storage, water infrastructure and site access roads.

	Capital Cost Estimate	Unit	Capital Cost
1	Treatment Plant Costs	US\$m	70,1
2	Reagents & Plant Services	US\$m	7,2
3	Infrastructure	US\$m	20,0
4	Mining	US\$m	15,6
5	Preliminaries and General	US\$m	20,1
6	Indirects	US\$m	7,6
7	Opening Stock	US\$m	2,0
8	EPCM	US\$m	20,6
9	Owners Costs	US\$m	12,5
	Total capital cost excl. contingency	US\$m	175,7
10	Estimated Contingency @ 15%	US\$m	26,0

#### Table 10: Capital Cost Estimate Summary

Process operating costs have been developed by Lycopodium for a life of mine (LOM) blend. It is expected that the plant will operate on a range of mineralized material blends.

Processing operating costs have been developed for a plant with an annual throughput equivalent to 3.5mtpa of fresh mineralized material plant feed at a grind size of 80% passing 75 µm, based on a 24 hour per day operation, 365 days per year. Additional work will confirm the processing costs associated with 80% passing 53µm grind.



#### Table 11: Processing Cost Estimate

	LOM Blend	
Proportion of LOM	100%	
Plant Feed t/y	3,500,000	
Cost Centre	US\$m/year	US\$/t
Power	10,8	3.08
Operating Consumables	13,4	3.82
Maintenance	4,0	1.15
Laboratory	0,6	0.16
Process Plant Labour	2,7	0.76
Total Processing	31,4	8.97

Mining operating costs were estimated based on the envisaged mining contractor's selected equipment fleet and organisational structure. The estimate was done from first principles, using the original equipment manufacturers ("**OEM**") hourly life cycle cost estimates with the simulated production rates for the primary mining equipment.

The unit operating cost estimates thus derived are summarized in table 12 below:

#### Table 12: Operating Cost Estimate Summary

Item	Unit	Unit Cost
Processing	US\$/t processed	8.97
Mining (average waste &		
mineralized material)	US\$/t mined	2.08
Mining (average waste &		
mineralized material)	US\$/t processed	12.48
Administration	US\$/t processed	3.00

Site administration costs have been estimated to be approximately UD\$10.5m per year based on similar sized operations in Namibia. This equates to US\$3.00/t mineralized material processed. A detailed schedule of administration costs will be generated as part of the feasibility study.

#### **Opportunities & Risks**

A number of significant project opportunities have been identified as part of this PEA, including the following:

- Conversion of Inferred to Indicated and/or Measured Mineral Resources would result from improved mineralisation models and grade estimates as a result of additional drilling.
- The conceptual pit shell generated to report the Mineral Resource resulted in the entire block model satisfying RPEEE. This suggests that undrilled material at depths below the RPEEE pit shell could potentially satisfy RPEEE requirements, and that the deposit is effectively open with depth.
- The step out drill program that is currently underway will be reflected in an updated Mineral Resource and Technical Report to be issued upon conclusion of this drill program, likely during H1 2022.
- Ongoing metallurgical testwork especially in terms of optimal grind size and leach kinetics should result in an optimized and improved process layout which could result in improved overall gold recovery.
- The mine design has significant potential to be improved by optimizing the pit and mine design and production schedule. For example, a reduction in the number of in-pit ramps could result in steeper slope angles, resulting in lower stripping, lower costs and therefore improved economics, and therefore also likely a deeper pit. Reducing the number of in-pit ramps could be justified on the basis of scheduling flexibility due to having three discrete pits as mineralized material sources.



- An increase in the mining rate beyond 25mtpa could result in more and higher-grade mineralized material reporting to the processing plant earlier, thereby improving the project economics.
- The on-going brownfields exploration program on the numerous occurrences and targets delineated along the Karibib Fault Zone suggests the possibility of additional gold resource discoveries along strike from Twin Hills which would result in further resource growth and concomitant improvement in project economics.
- The dry nature of the surrounding area and the limited water supply options in this region of Namibia suggests that the key project risk would be water-supply. In order to mitigate this risk Osino is presently engaged in an extensive hydro-geological assessment phase to demonstrate alternative and sustainable water supply options for the project.

#### Interpretation and Conclusions

Lycopodium's conclusion was that the Twin Hills Gold Project PEA is a low technical risk conventional open pit mine and carbon-in-leach processing facility with a flowsheet which is based on unit operations that are proven in industry.

An economic analysis of the mine schedule generated from the PEA resource model has shown financial viability of the project at a gold price of \$1700/ oz, and the sensitivity analysis has demonstrated continued profitability against changes in key project parameters at different gold prices.

A review of the outcomes of the PEA analysis indicates that the project is robust and has no fatal flaws, and it is therefore recommended that the project is progressed to the feasibility study level.

#### Presentation & Investor Webinar

Osino will host an investor webinar to discuss the PEA on Monday July 19, 2021 at 8am PDT / 11am EDT. Shareholders, analysts, investors and media are invited to join the live webcast by registering using the following link: <u>https://my.6ix.com/laJN89-6</u>

After registering, you will receive a confirmation email containing details to access the webinar via conference call or webcast. The replay will also be available on Osino's website.

A presentation to accompany the webinar will be available on the Company's website.

#### **Qualified Persons & Technical Report**

#### Anton Geldenhuys

Mr Anton Geldenhuys is a Principal Consultant of CSA Global South Africa (Pty) Ltd. and holds a BSc (Hons) Geology degree from Rand Afrikaans University (South Africa) and an MEng from the University of the Witwatersrand (South Africa). He is a member in good standing of the Geological Society of South Africa and a registered Professional Natural Scientist (PrSciNat) with the South African Council for Natural Scientific Professions (SACNASP, membership number 400313/04). He is familiar with NI 43-101 and, by reason of education, experience in exploration, mineral resource development, evaluation of mining projects and professional registration fulfils the requirements of a Qualified Person as defined in NI 43-101. Mr Geldenhuys' experience includes 20 years continues professional experience in the exploration and mining industry and has reviewed and approved the scientific and technical information in this news release related to Mineral Resources.



#### **Grahame Hetherington**

Mr Grahame Hetherington is a Principal Process Consultant of Lycopodium Minerals Africa (Pty) Ltd. He holds a BEng (Hons) degree in Metallurgical Engineering from the University of Newcastle-upon-Tyne (UK) and he is a member of the Australian Institute of Mining and Metallurgy (membership number 318140). Mr Hetherington's experience includes 30 continuous years in the minerals processing industry in production and project design and execution. He is familiar with NI 43-101 and, by reason of education, experience in exploration, mineral resource development, evaluation of mining projects and professional registration, he fulfils the requirements of a Qualified Person as defined in NI 43-101. He has been involved with the Project since July 2020 and has reviewed and approved the scientific and technical information in this news release related to Mineral Processing and Metallurgical Testing.

#### Werner Moeller

Mr Werner Moeller is a Director and Principal Mining Engineering Consultant of Qubeka Mining Consultants CC based in Windhoek, Namibia. He holds a BEng (Hons) degree in Mining and Industrial Engineering from the University of Pretoria (South Africa). He is a member in good standing of the Australian Institute of Mining and Metallurgy (membership number 329888), the Canadian Institute of Mining, Metallurgy and Petroleum (membership number 708163) and the South African Institute of Mining and Metallurgy (membership number 708163). Mr Moeller has been practicing his profession continuously since 2002 and has twenty years of mine planning and operations experience across a range of African projects. He is familiar with NI 43-101 and, by reason of education, experience in exploration, mineral resource development, estimation and reporting of ore reserves, evaluation of mining projects and professional registration, he fulfils the requirements of a Qualified Person as defined in NI 43-101. He has been involved with the Project since September 2020 and has reviewed and approved the scientific and technical information in this news release related to Mining.

#### David Underwood

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 related to geology and exploration. He 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 Lycopodium

Lycopodium is an innovative and value-driven process, engineering and project delivery organisation with extensive African experience. The Company is headquartered in Perth, Western Australia and is listed on the Australian Stock Exchange (ASX: LYL) and with its global offices and international network, Lycopodium is able to offer its clients professional services for Feasibility Studies, Process Development and Optimisation, Engineering and Design, Project Management and Delivery, Project Services, Construction Management, Completions, and Commissioning and Operations Support including Asset Management.

#### About Osino Resources

Osino is a Canadian gold exploration and development company focused on the advancement of the Twin Hills gold project in central Namibia. Twin Hills was discovered by Osino in 2019 and is currently in the growth and derisking phase whilst being fast-tracked to production.

Osino also has a large ground position of approximately 6,700km<sup>2</sup> 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 other 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 in central and northern Namibia within easy driving distance from the 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/

**CONTACT INFORMATION** Osino Resources Corp. Julia Becker: Investor Relations Manager Tel: +1 (604) 785 0850 jbecker@osinoresources.com

#### Cautionary Statement Regarding Forward-Looking Information

This press release contains "forward-looking information" within the meaning of applicable Canadian securities legislation. Forward-looking information includes, without limitation, statements regarding the use of proceeds from the Company's recently completed financings, and the future plans or prospects of the Company, including prospects for economic recoverability of mineral resources. Generally, forward-looking information can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur" or "be achieved". Forward-looking statements are necessarily based upon a number of assumptions that, while considered reasonable by management, are inherently subject to business, market and economic risks, uncertainties and contingencies that may cause actual results, performance or achievements to be materially different from those expressed or implied by forward-looking statements. Although the Company has attempted to identify important factors that could cause actual results to differ materially from those contained in forward-looking information, there may be other factors that cause results not to be as anticipated, estimated or intended. There can be no assurance that such information will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking information. Other factors which could materially affect such forward-looking information are described in the risk factors in the Company's most recent annual management's discussion and analysis which is available on SEDAR at www.sedar.com. The Company does not undertake to update any forward-looking information, except in accordance with applicable securities laws.

The results of this PEA are based on the material assumptions outlined herein and in the Technical Report that will comprise the PEA, which will be published within 45 days of the date hereof. These include assumptions about the availability of funding. While Osino considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the results of the PEA will be achieved. To achieve the range of outcomes indicated by the results of the results of in the order of US\$200 million will likely be required. Investors should note that there is no certainty that amount of funding when needed. It is also likely that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Osino's existing shares. It is also possible that Osino could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project.



If it does, this could materially reduce Osino's proportionate ownership of the project. Given the uncertainties involved, investors should not make any investment decisions based solely on the results of the PEA.

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this press release.