

OSISKO DEVELOPMENT FILES TECHNICAL REPORT ON MINERAL RESOURCE ESTIMATE FOR THE TRIXIE DEPOSIT, TINTIC PROJECT

Montreal, Québec, April 26, 2024 – Osisko Development Corp. (NYSE: ODV, TSXV: ODV) ("Osisko Development" or the "Company") announces the filing of a technical report (the "**Technical Report**") for the updated mineral resource estimate ("**MRE**") on its 100%-owned underground Trixie deposit (the "**2024 Trixie MRE**"), within the Company's wider Tintic Project ("**Tintic**" or the "**Tintic Project**"), located in the historic East Tintic Mining District in central Utah, U.S.A. Highlights from the previously-announced 2024 Trixie MRE disclosed in the Company's news release dated March 15, 2024 are presented below, and are consistent with the Technical Report.

The Technical Report, titled "*NI 43-101 Technical Report, Mineral Resource Estimate for the Trixie Deposit, Tintic Project, Utah, United States of America*" and dated April 25, 2024 (with an effective date of March 14, 2024), was prepared for the Company by independent representatives of Micon International Limited in accordance with National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("**NI 43-101**"). Reference should be made to the full text of the Technical Report, which is available electronically on SEDAR+ (www.sedarplus.ca) and on EDGAR (www.sec.gov) under Osisko Development's issuer profile and on the Company's website at <https://osiskodev.com/tintic-project>.

2024 TRIXIE MINERAL RESOURCE ESTIMATE

Table 1: 2024 Trixie MRE (all zones) – March 14, 2024

Classification	Tonnes (000's)	Au Grade (g/t)	Contained Gold (000's oz)	Ag Grade (g/t)	Contained Silver (000's oz)
Measured	120	27.36	105	61.73	238
Indicated	125	11.17	45	59.89	240
Measured and Indicated	245	19.11	150	60.80	478
Inferred	202	7.80	51	48.55	315

Notes (applicable to Tables 1, 2, and 3)

- Effective date of the 2024 Trixie MRE is March 14, 2024.
- Each of Mr. William Lewis, P.Geo., of Micon International Limited and Alan J. San Martin, MAusIMM(CP), of Micon International Limited (i) has reviewed and validated the 2024 Trixie MRE, (ii) is considered to be independent of the Company for purposes of Section 1.5 of National Instrument 43-101 – *Standards of Disclosure for Mineral Projects* ("**NI 43-101**"), and (iii) is a "qualified person" within the meaning of NI 43-101.
- The mineral resources were estimated using the Canadian Institute of Mining ("**CIM**"), Metallurgy and Petroleum's "*CIM Definition Standards on Mineral Resources and Mineral Reserves*" adopted by the CIM council.
- Mineral resources are reported when they are within potentially mineable shapes derived from a stope optimizer algorithm, assuming an underground longhole stoping mining method with stopes of 6.1 m x 6.1 m x minimum 1.5 m dimensions.
- Mineral resources that are not mineral reserves do not have demonstrated economic viability.
- Geologic modelling was completed by Osisko Development modeling geologist Jody Laing, P.Geo, using Leapfrog Geo software. The 2024 Trixie MRE was completed by Osisko Development chief resource geologist, Daniel Downton, P.Geo using Datamine Studio RM 2.0 software. William Lewis and Alan J. San Martin of Micon International Limited independently reviewed and validated the mineral resource model.
- The estimate is reported for an underground mining scenario and with USD assumptions. The cut-off grade of 4.32 g/t Au was calculated using a gold price of US\$1,750/oz, a CAD:USD exchange rate of 1.30; total mining, processing and G&A costs of US\$168.04/imperial ton; a refining cost of US\$2.65/ounce; a combined royalty of 4.50%; and an average metallurgical gold recovery of 80%.
- The stope optimizer algorithm evaluated the resources based on a gold equivalent grade which incorporates the silver grade estimate and assumes a silver price of US\$23/oz and metallurgical silver recovery of 45%.
- The 2024 Trixie MRE is comprised of six zones within the greater Trixie area: T2, T3, T4, Wild Cat, 40 Fault and 75-85.
- Average bulk density values in the mineralized domains were assigned to the T2 (2.955 T/m³), T3 (2.638 T/m³), T4(2.618 T/m³), Wild Cat, and 40 Fault (2.621 T/m³), and 75-85 (2.617 T/m³) domains.

11. Inverse Distance Squared interpolation method was used with a parent block size of 1.2 m x 2.4 m x 2.4 m.
12. The 2024 Trixie MRE results are presented in-situ. Calculations used metric units (metres, tonnes, g/t). The number of tonnes is rounded to the nearest thousand. Any discrepancies in the totals are due to rounding effects.
13. Neither the Company nor Micon International Limited is aware of any known environmental, permitting, legal, title-related, taxation, socio-political, marketing or other relevant issue that could materially affect the mineral resource estimate other than disclosed in this news release.
14. Technical information in this news release differs from similar information made public by U.S. companies subject to the reporting and disclosure requirements of the U.S. Securities and Exchange Commission. See below under "Cautionary Statement to U.S. Investors".

Table 2: 2024 Trixie MRE Separated by Domain – March 14, 2024

Domain	Category	Tonnes	Grade (Au g/t)	Contained Gold (oz)	Grade (Ag g/t)	Contained Silver (oz)
T2	Measured	22,678	106.27	77,484	115.99	84,572
	Indicated	11,939	23.19	8,902	51.07	19,602
	M+I	34,617	77.62	86,387	93.60	104,173
	Inferred	1,996	9.82	630	61.38	3,938
T3	Measured	2,385	9.46	725	75.34	5,776
	Indicated	970	5.47	171	57.32	1,787
	M+I	3,355	8.30	896	70.13	7,564
	Inferred	139	6.27	28	63.14	282
T4 + Wild Cat + 40 FLT	Measured	94,784	8.93	27,227	48.41	147,520
	Indicated	51,827	6.48	10,795	37.59	62,637
	M+I	146,611	8.07	38,023	44.58	210,156
	Inferred	104,676	6.57	22,127	38.57	129,792
75-85	Measured	-	-	-	-	-
	Indicated	60,008	12.93	24,943	80.95	156,185
	M+I	60,008	12.93	24,943	80.95	156,185
	Inferred	94,793	9.12	27,784	59.28	180,666
Total	Measured	119,847	27.36	105,437	61.73	237,868
	Indicated	124,743	11.17	44,811	59.89	240,211
	M+I	244,590	19.11	150,248	60.80	478,078
	Inferred	201,603	7.80	50,569	48.55	314,678

Refer to notes described under Table 1, which are also applicable to Table 2 in their entirety.

Table 3: Trixie MRE Cut-Off Grade ("COG") Sensitivity (Base Case in Bold) – March 14, 2024

Classification	Tonnes	COG	Grade (Au g/t)	Contained Gold (oz)	Grade (Ag g/t)	Contained Silver (oz)
Measured + Indicated	366,130	2.50	13.79	162,348	50.18	590,666
	324,251	3.00	15.23	158,722	53.31	555,740
	291,005	3.50	16.64	155,716	56.19	525,681
	261,219	4.00	18.14	152,350	58.95	495,091
	244,590	4.32	19.11	150,248	60.80	478,078
	237,143	4.50	19.58	149,266	61.52	469,058
	217,327	5.00	20.99	146,677	64.07	447,646
	198,538	5.50	22.55	143,909	66.19	422,504
	182,842	6.00	24.01	141,164	68.57	403,074
	165,955	6.50	25.81	137,734	71.39	380,902

	152,986	7.00	27.55	135,503	74.34	365,663
Inferred	438,189	2.50	5.26	74,056	34.46	485,528
	342,880	3.00	5.99	66,034	38.38	423,112
	279,722	3.50	6.65	59,767	41.84	376,306
	224,039	4.00	7.42	53,438	46.31	333,578
	201,603	4.32	7.80	50,569	48.55	314,678
	190,002	4.50	8.02	49,009	49.90	304,803
	163,894	5.00	8.60	45,313	53.08	279,718
	141,728	5.50	9.16	41,742	55.92	254,818
	123,472	6.00	9.71	38,532	58.70	233,028
	106,080	6.50	10.35	35,291	60.43	206,087
	91,725	7.00	10.99	32,397	61.91	182,579

Note: Micon International Limited's "qualified person" (for purposes of NI 43-101) has reviewed the COG used in the sensitivity analysis relating to the 2024 Trixie MRE and is of the opinion that the individual cut-off grades used in the sensitivity analysis meet the test of reasonable prospects of economic extraction. The numbers in bold represent the current 2024 Trixie MRE.

Table 4: Trixie MRE Cut-off Grade Calculation Breakdown

PARAMETERS	VALUES
Mining Cost (\$/ST)	\$74.33
G&A (\$/ST)	\$52.71
Heap Leach (\$/ST)	\$41.00
Total Refining Cost/ OZ	\$2.65
Gold Price	\$1,750
Royalty (Combination)	4.50%
Heap Leach Au Recovery	80.0%
Cut-off Grade (COG)	4.32

Qualified Persons

The scientific and technical information contained in this news release has been reviewed and approved by Maggie Layman, P.Ge., Vice President, Exploration of Osisko Development, and a "qualified person" within the meaning of NI 43-101 ("QP").

The independent QPs for the 2024 Trixie MRE, within the meaning of NI 43-101, are William Lewis, P.Ge. and Alan J. San Martin MAusIMM(CP) of Micon International Limited. Each QP is independent of Osisko Development within the meaning of NI 43-101 and has reviewed and approved the content in this news release.

Quality Assurance (QA) – Quality Control (QC)

All drill core and exploration samples are dispatched to ALS Geochemistry or SGS Canada for offsite sample preparation and analysis. Both labs are ISO/IEC 17025 certified, and ALS Geochemistry is also ISO 9001 certified. Samples are assigned a unique sample ID. All geological and sampling information is entered into a Datamine Fusion database. Core is sawn in half and half is sampled. Certified standards and blanks are inserted into all sample dispatches. Samples are collected by Old Dominion Transportation and dispatched to SGS Canada's laboratory in Burnaby, British Columbia or ALS Geochemistry's laboratories in Elko, Nevada or Twin Falls, Idaho. Sample submission forms accompany the samples, and digital copies are emailed to the destination lab.

Core sample preparation is completed by ALS Geochemistry or SGS Canada, including drying, crushing, and pulverizing of samples. Analytical assays include gold by 30-gram fire assay with AAS finish, and gold overlimits by fire assay with gravimetric finish. Screen metallic analyses are performed on selected samples. Multielement analysis (including silver) is by four-acid digest with ICP-AES/ICP-MS finish. The

pulps are returned to Osisko Development and coarse rejects are disposed after 90 days. Assays are reported to Osisko Development and then loaded into Datamine Fusion. Quality Assurance-Quality Control samples are checked, and assays are merged with sample information for future reporting.

Underground face samples are collected by Company geologists from each of the active mining faces, with samples transported by the geologists from Trixie to the on-site Company laboratory located at the Burgin administrative complex. Underground samples are dried, crushed to <10 mm and a 250 g split is taken. The split is pulverized, and a 30 g Fire Assay with gravimetric finish is completed to determine gold and silver grades, reported in oz/short ton and g/t.

The Company's Burgin laboratory is not a certified analytical laboratory, but the facility is managed by a qualified laboratory manager with annual auditing by technical staff. The laboratory has been independently audited by Qualitica Consulting and Micon International Limited's QP with recommendations implemented. Inter-laboratory check assays using ALS Geochemistry as a third-party independent analysis of samples is routinely carried out as part of ongoing QA/QC work. Certified OREAS QC standards and blanks are inserted at regular intervals in the sample stream to monitor laboratory performance.

True width is estimated to be approximately 0.5 m - 3 m (1.6 - 10 ft) for all fissure veins and discrete structures (T2, T3, 75-85, Wildcat and 40 Fault) and the T4 zone is modelled at an average width of 90 m (300 ft) and encompasses disseminated mineralization and discontinuous veins ranging from several cm to 1 m (3 ft).

ABOUT OSISKO DEVELOPMENT CORP.

Osisko Development Corp. is a North American gold development company focused on past-producing mining camps located in mining friendly jurisdictions with district scale potential. The Company's objective is to become an intermediate gold producer by advancing its 100%-owned Cariboo Gold Project, located in central B.C., Canada, the Tintic Project in the historic East Tintic mining district in Utah, U.S.A., and the San Antonio Gold Project in Sonora, Mexico. In addition to considerable brownfield exploration potential of these properties, that benefit from significant historical mining data, existing infrastructure and access to skilled labour, the Company's project pipeline is complemented by other prospective exploration properties. The Company's strategy is to develop attractive, long-life, socially and environmentally sustainable mining assets, while minimizing exposure to development risk and growing mineral resources.

For further information, visit our website at www.osiskodev.com or contact:

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CAUTIONARY STATEMENTS

Cautionary Statement Regarding Estimates of Mineral Resources

This news release uses the terms measured, indicated and inferred mineral resources as a relative measure of the level of confidence in the resource estimate. Readers are cautioned that mineral resources are not mineral reserves and that the economic viability of resources that are not mineral reserves has not been demonstrated. The mineral resource estimate disclosed in this news release may be materially affected by geology, environmental, permitting, legal, title, socio-political, marketing or other relevant issues. The mineral resource estimate is classified in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum's "CIM Definition Standards on Mineral Resources and Mineral Reserves" incorporated by reference into NI 43-101. Under NI 43-101, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies or economic studies except for preliminary economic assessments. Readers are cautioned not to assume that further work on the stated resources will lead to mineral reserves that can be mined economically.

Cautionary Statement Regarding Test Mining Without Feasibility Study

The Company cautions that its prior decision to commence small-scale underground mining activities and batch vat leaching at the Trixie test mine was made without the benefit of a feasibility study, or reported mineral resources or mineral reserves, demonstrating economic and technical viability, and, as a result there may be increased uncertainty of achieving any particular level of recovery of material or the cost of such recovery. The Company cautions that historically, such projects have a much higher risk of economic and technical failure. Small scale test-mining at Trixie was suspended in December 2022, resumed in the second quarter of 2023, and suspended once again in December 2023. If and when small-scale test-mining recommences at Trixie, there is no guarantee that production will continue as anticipated or at all or that anticipated production costs will be achieved. The failure to continue production

may have a material adverse impact on the Company's ability to generate revenue and cash flow to fund operations. Failure to achieve the anticipated production costs may have a material adverse impact on the Company's cash flow and potential profitability. In continuing operations at Trixie after closing, the Company has not based its decision to continue such operations on a feasibility study, or reported mineral resources or mineral reserves demonstrating economic and technical viability.

Cautionary Statement to U.S. Investors

The Company is subject to the reporting requirements of the applicable Canadian securities laws and as a result reports information regarding mineral properties, mineralization and estimates of mineral reserves and mineral resources, including the information in its technical reports, financial statements, MD&A and this news release, in accordance with Canadian reporting requirements, which are governed by NI 43-101. As such, such information concerning mineral properties, mineralization and estimates of mineral reserves and mineral resources, including the information in its technical reports, financial statements, MD&A and this news release, is not comparable to similar information made public by U.S. companies subject to the reporting and disclosure requirements of the U.S. Securities and Exchange Commission ("**SEC**").

CAUTION REGARDING FORWARD LOOKING STATEMENTS

Certain statements contained in this news release may be deemed "forward-looking statements" within the meaning of the United States Private Securities Litigation Reform Act of 1995 and "forward-looking information" within the meaning of applicable Canadian securities legislation (together, "forward-looking statements"). These forward-looking statements, by their nature, require Osisko Development to make certain assumptions and necessarily involve known and unknown risks and uncertainties that could cause actual results to differ materially from those expressed or implied in these forward-looking statements. Forward-looking statements are not guarantees of performance. Words such as "may", "will", "would", "could", "expect", "believe", "plan", "anticipate", "intend", "estimate", "continue", or the negative or comparable terminology, as well as terms usually used in the future and the conditional, are intended to identify forward-looking statements. Information contained in forward-looking statements is based upon certain material assumptions that were applied in drawing a conclusion or making a forecast or projection, including the assumptions, qualifications and limitations relating to the significance of the high-priority target drilling; the utility of modern exploration techniques; the potential for parallel high-grade gold fissure zones; the potential of Tintic to host a copper-gold porphyry center; the significance of regional exploration potential; the results of the 2024 Trixie MRE; the capital resources available to Osisko Development; the ability of the Company to execute its planned activities; the ability of the Company to obtain future financing and the terms of such financing; management's perceptions of historical trends, current conditions and expected future developments; the utility and significance of historic data, including the significance of the district hosting past producing mines; future mining activities; unique mineralization at Trixie; the potential of high-grade gold mineralization on Trixie; the potential for unknown mineralized structures to extend existing zones of mineralization; category conversion; the timing and status of permitting; the results (if any) of further exploration work to define and expand mineral resources; the ability of exploration work (including drilling and chip sample assays, and face sampling methodologies) to accurately predict mineralization; the ability to generate additional drill targets; the ability of management to understand the geology and potential of the Company's properties; the ability of the Company to expand mineral resources beyond current mineral resource estimates; the ability of the Company to complete its exploration objectives for its projects in 2024 in the timing contemplated (if at all); the ongoing advancement of the deposits on the Company's properties; the deposit remaining open for expansion at depth and down plunge; the ability to realize upon any mineralization in a manner that is economic; the ability to adapt to changes in gold prices, estimates of costs, estimates of planned exploration and development expenditures; the ability of the Company to obtain further capital on reasonable terms; assay results presented in this news release; the profitability (if at all) of the Company's operations; the Company being a well-positioned gold development company in Canada, USA and Mexico; sustainability and environmental impacts of operations at the Company's properties; as well as other considerations that are believed to be appropriate in the circumstances, and any other information herein that is not a historical fact may be "forward looking information". Material assumptions also include, management's perceptions of historical trends, the ability of exploration (including drilling and chip sample assays, and face sampling) to accurately predict mineralization, budget constraints and access to capital on terms acceptable to the Company, current conditions and expected future developments, regulatory framework remaining defined and understood, results of further exploration work to define or expand any mineral resources, as well as other considerations that are believed to be appropriate in the circumstances. Osisko Development considers its assumptions to be reasonable based on information currently available, but cautions the reader that their assumptions regarding future events, many of which are beyond the control of Osisko Development, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect Osisko Development and its business. Such risks and uncertainties include, among others, risks relating to capital market conditions and the Company's ability to access capital on terms acceptable to the Company for the contemplated exploration and development at the Company's properties; the ability to continue current operations and exploration; regulatory framework and presence of laws and regulations that may impose restrictions on mining; the ability of exploration activities (including drill and chip sampling, and face sampling results) to accurately predict mineralization; errors in management's geological modelling; the ability to expand operations or complete further exploration activities, including drilling and chip sample assays and face sampling; the timing and ability of the Company to obtain required approvals and permits; the results of exploration activities; risks relating to exploration, development and mining activities; the global economic climate; metal and commodity prices; fluctuations in the currency markets; dilution; environmental risks; and community, non-governmental and governmental actions and the impact of stakeholder actions. Readers are urged to consult the disclosure provided under the heading "Risk Factors" in the Company's annual information form for the year ended December 31, 2023 as well as the financial statements and MD&A for the year ended December 31, 2023, which have been filed on SEDAR+ (www.sedarplus.ca) under Osisko Development's issuer profile and on the SEC's EDGAR website (www.sec.gov), for further information regarding the risks and other factors applicable to the exploration results. Although the Company believes the expectations conveyed by the forward-looking statements are reasonable based on information available as of the date hereof, no assurances can be given as to future results, levels of activity and achievements. The Company disclaims any obligation to update any forward-looking statements, whether as a result of new information, future events or results or otherwise, except as required by law. Forward-looking statements are not guarantees of performance and there can be no assurance that these forward-looking statements 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 statements.

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 news release. No stock exchange, securities commission or other regulatory authority has approved or disapproved the information contained herein.