



OSISKO DEVELOPMENT

OSISKO DEVELOPMENT EXPANDS AND DELINEATES NEW HIGH GRADE VEIN CORRIDORS ON BARKERVILLE MOUNTAIN'S LOWHEE ZONE

BM-21-015 INTERSECTS 6.26 G/T GOLD OVER 7.60 METERS

MONTREAL, May 19, 2021 – Osisko Development Corp. (“**Osisko Development**” or the “**Company**”) (TSX.V: ODV) is pleased to announce drilling results from the 200,000-meter 2021 exploration and category conversion drill program campaign at its Cariboo Gold Project (“**Cariboo Project**”) in central British Columbia. A total of ten diamond drill rigs are currently active on the Cariboo Project.

Lowhee Zone Overview

- Two rigs currently operating on Lowhee Zone located on Barkerville Mountain.
- Recent results include holes BM-21-001 to BM-21-018.
- Mineralized vein corridors are currently defined along 650 meters strike by 350 meters in the sandstone to a depth of 275 meters and is open in all directions.
- Lowhee is interpreted to be the strike extension of Cow Mountain as shown in recent results.
- Based on the Mineral Resource Estimate dated October 5, 2020, at a cut-off grade of 2.10 g/t Au, the Lowhee Zone contains 46,000 oz in the indicated category and 105,000 oz Au in the inferred category based on only 23 drill holes.
- A total of 73 drill holes have since been drilled in the Lowhee Zone.
- Detailed drilling results, a drill hole location plan map and vertical long section is presented at the end of this release.

Recent Drilling Highlights:

- **13.22 g/t Au** over 2.60 meters in hole BM-21-001
- **6.14 g/t Au** over 6.55 meters in hole BM-21-002 including
- **43.70 g/t Au** over 0.60 meter in hole BM-21-002
- **70.90 g/t Au** over 1.00 meter in hole BM-21-013
- **6.26 g/t Au** over 7.60 meters in hole BM-21-015
- **7.97 g/t Au** over 4.05 meters in hole BM-21-016 including
- **58.80 g/t Au** over 0.50 meter in hole BM-21-016
- **41.39 g/t Au** over 1.10 meters in hole BM-21-017 including
- **70.20 g/t Au** over 0.60 meter in hole BM-21-017

Chris Lodder, President of Osisko Development commented, “With these initial drill results, Lowhee extends the Cariboo Gold Project resource footprint to beyond 4 km of strike length demonstrating near continuous vein corridor style mineralization from Mosquito Creek to Lowhee, open in along strike and at depth.”

Mineralized quartz veins on Cariboo are overall sub-vertical dip and northeast strike. Vein corridors are defined as a high-density network of mineralized quartz veins within the axis of the last folding event's folds and hosted within a brittle meta-sandstone or calcareous meta-sandstone. Vein corridors are modelled at a minimum thickness of 2 meters and average about 4.5 meters true width. Individual mineralized veins within these corridors have widths varying from centimeters to several meters and strike lengths from a few meters to over 50 meters. These corridors have been defined from surface to a vertical depth averaging 300 meters and remain open for expansion at depth and along strike. Gold grades are intimately associated with quartz vein-hosted pyrite as well as pyritic, intensely silicified wall rock haloes in close proximity to the veins.

True widths are estimated to be 60% to 75% of reported core length intervals. Intervals not recovered by drilling were assigned zero grade. Top cuts have not been applied to high grade assays. Complete assay highlights are presented in Table 1, drill hole locations are listed in Table 2.

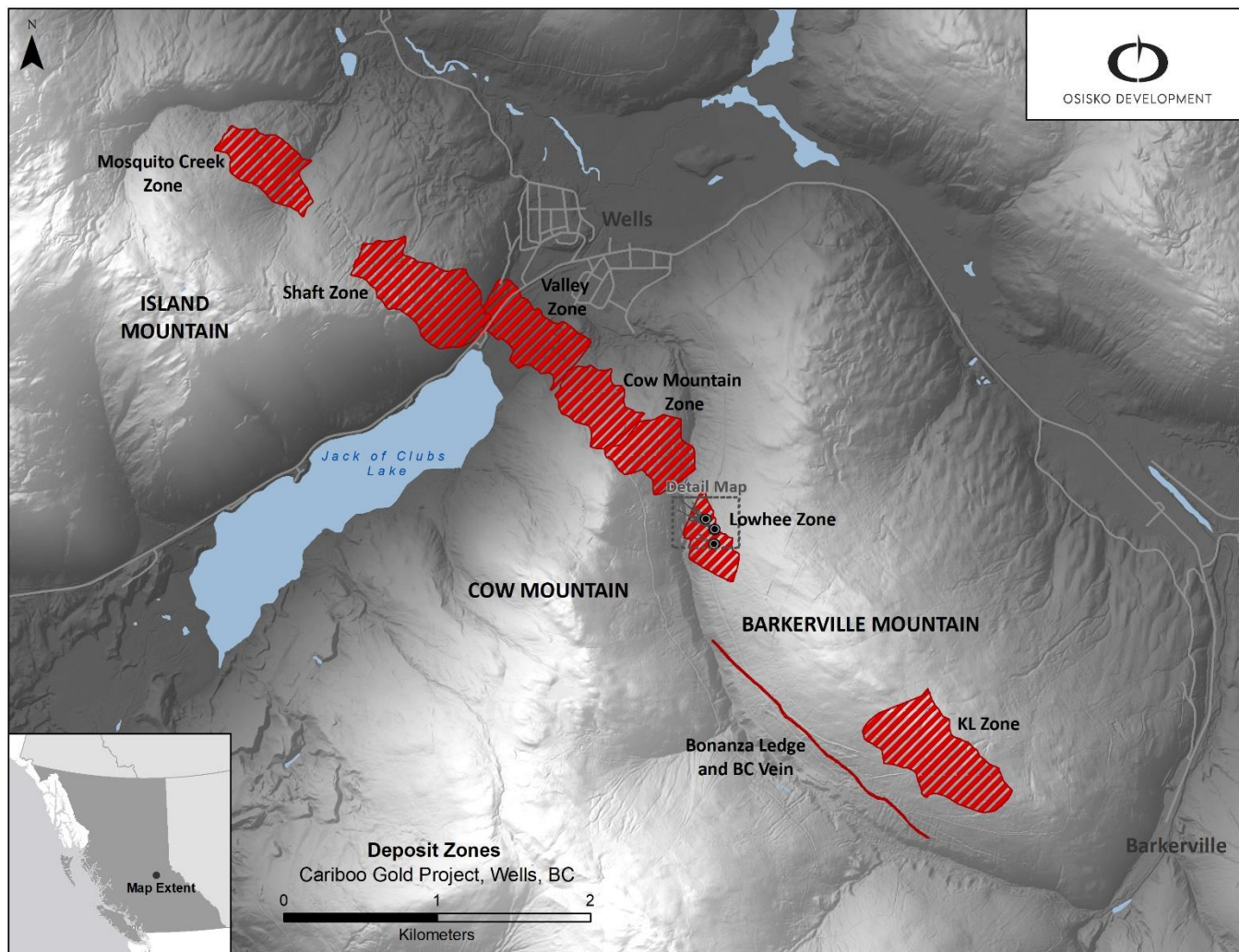


Figure 1: Cariboo Deposit Areas with drill locations.

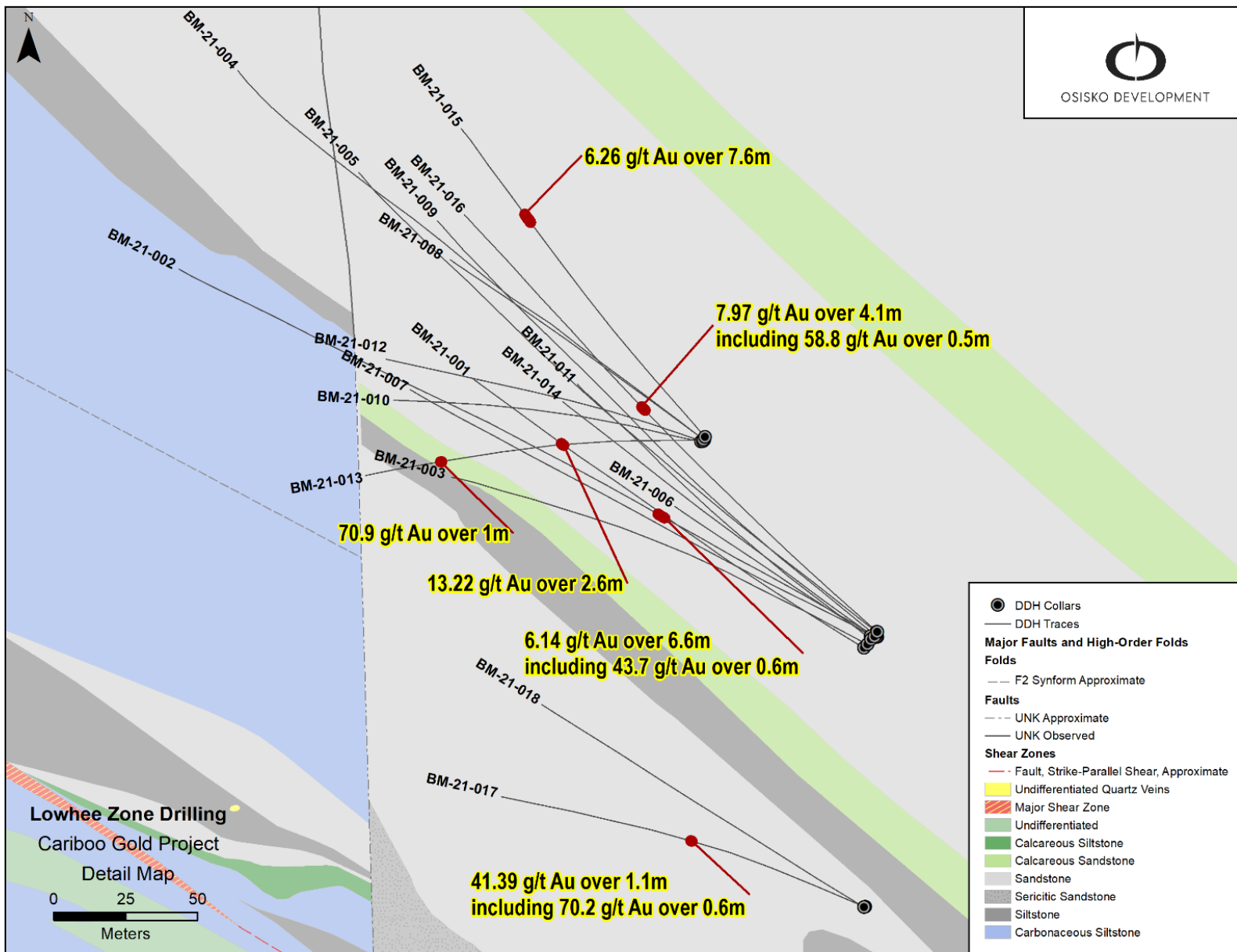


Figure 2: Lowhee detail area with drill intercept highlights

BARKERVILLE MOUNTAIN

LOWHEE ZONE

LONG SECTION

50 METER ENVELOPE

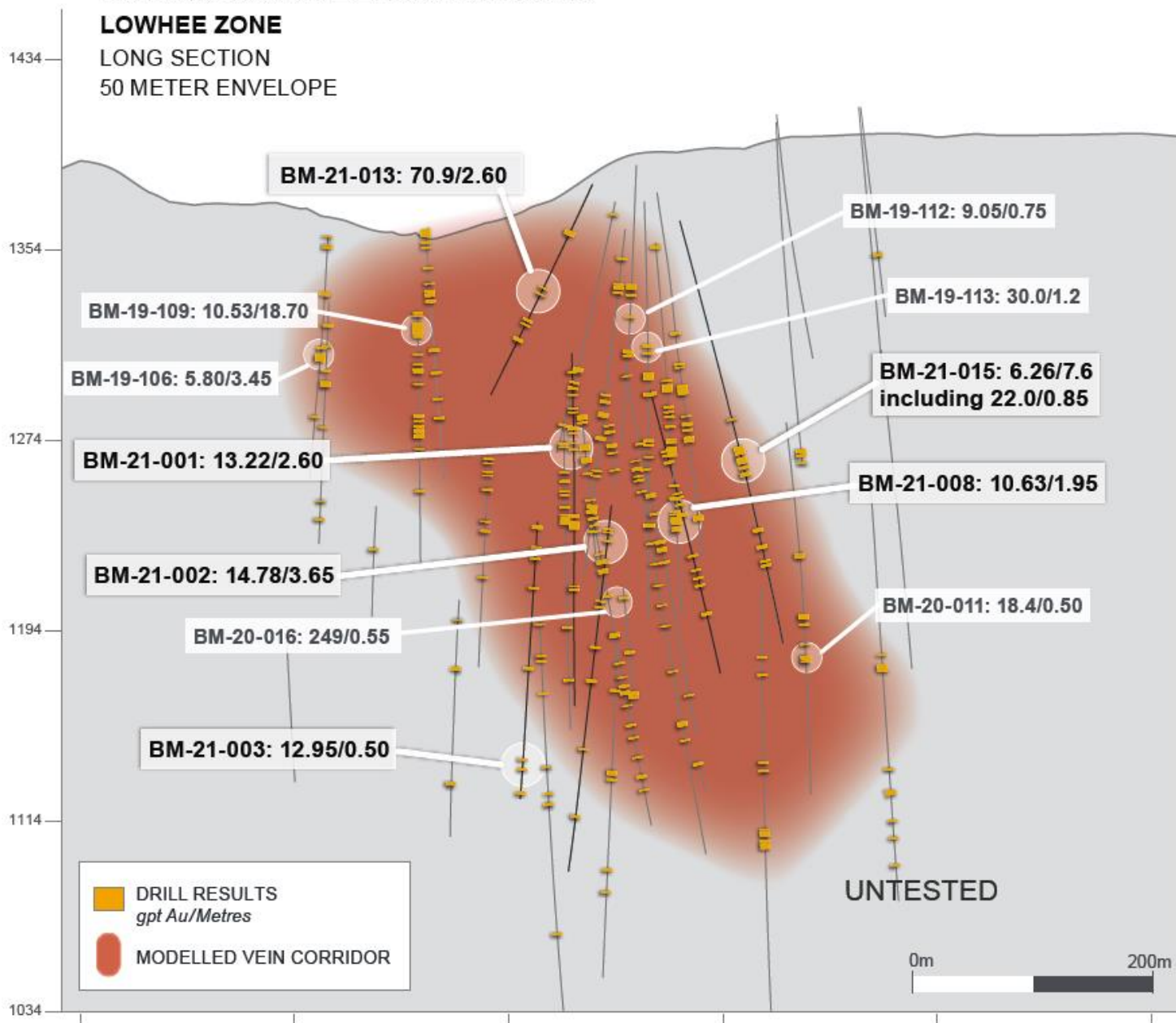


Figure 3: Lowhee Zone Long Section

Qualified Persons

Per National Instrument 43-101 Standards of Disclosure for Mineral Projects, Maggie Layman, P.Geo. Vice President Exploration of Osisko Development Corp., is a Qualified Person and has prepared, validated, and approved the technical and scientific content of this news release.

Quality Assurance – Quality Control

Once received from the drill and processed, all drill core samples are sawn in half, labelled and bagged. The remaining drill core is subsequently stored on site at a secured facility in Wells, BC. Numbered security tags are applied to lab shipments for chain of custody requirements. Quality control (QC) samples are inserted at regular intervals in the sample stream, including blanks and reference materials with all sample shipments to monitor laboratory performance. The QAQC program was designed and approved by Lynda Bloom, P.Geo. of Analytical Solutions Ltd.

Drill core samples are submitted to ALS Geochemistry's analytical facility in North Vancouver, British Columbia for preparation and analysis. The ALS facility is accredited to the ISO/IEC 17025 standard for gold assays and all analytical methods include quality control materials at set frequencies with established data acceptance criteria. The entire sample is crushed, and 250 grams is pulverized. Analysis for gold is by 50g fire assay fusion with atomic absorption (AAS) finish with a lower limit of 0.01 ppm and upper limit of 100 ppm. Samples with gold assays greater than 100 ppm are re-analyzed using a 1,000g screen metallic fire assay. A selected number of samples are also analyzed using a 48 multi-elemental geochemical package by a 4-acid digestion, followed by Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP-AES) and Inductively Coupled Plasma Mass Spectroscopy (ICP-MS).

About Osisko Development Corp.

Osisko Development Corp. is well-capitalized and uniquely positioned as a premier gold development company in North America to advance the Cariboo Gold Project and other Canadian and Mexican properties, with the objective of becoming the next mid-tier gold producer. The Cariboo Gold Project, located in central British Columbia, is Osisko Development's flagship asset with measured and indicated resources of 21.44 Mt at 4.6 Au g/t for a total of 3.2 million ounces of gold and inferred resource of 21.69 Mt at 3.9 Au g/t for a total of 2.7 million ounces of gold (see NI 43-101 Technical Report for resource October 5th, 2020). The considerable exploration potential at depth and along strike distinguishes the Cariboo Gold Project relative to other development assets as does the historically low, all-in discovery costs of US \$19 per ounce. The Cariboo Gold Project is advancing through permitting as a 4,750 tonnes per day underground operation with a feasibility study on track for completion in the second half of 2021. Osisko Development's project pipeline is complemented by potential near-term production targeted from the San Antonio gold project, located in Sonora Mexico and early exploration stage properties including the Coulon Project and James Bay Properties located in Québec as well as the Guerrero Properties located in Mexico. Osisko Development began trading on the TSX Venture Exchange under the symbol "ODV" on December 2, 2020.

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Forward-looking Statements

Certain statements contained in this press release may be deemed “forward-looking statements” within the meaning of applicable Canadian and U.S. securities laws. These forward-looking statements, by their nature, require Osisko 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 management’s perceptions of historical trends, current conditions and expected future developments, results of further exploration work to define and expand mineral resources, that vein corridors continue to be defined as a high-density network of mineralized quartz within the axis of the last folding event’s folds and hosted within a brittle meta-sandstone or calcareous meta-sandstone and that the deposit remains open in along strike and at depth, as well as other considerations that are believed to be appropriate in the circumstances. Osisko 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, may ultimately prove to be incorrect since they are subject to risks and uncertainties that affect Osisko and its business. Such risks and uncertainties include, among others, risks relating to the ability of exploration activities (including drill results) to accurately predict mineralization; errors in management’s geological modelling; the ability of to complete further exploration activities, including drilling; property and royalty interests in the Cariboo gold deposit; the ability of the Corporation to obtain required approvals; the results of exploration activities; risks relating to mining activities; the global economic climate; metal prices; dilution; environmental risks; and community and non-governmental actions and the responses of relevant governments to the COVID-19 outbreak and the effectiveness of such responses.

For additional information with respect to these and other factors and assumptions underlying the forward-looking statements made in this news release concerning Osisko Development, see the Filing Statement available electronically on SEDAR (www.sedar.com) under Osisko Development's issuer profile. The forward-looking statements set forth herein concerning Osisko Development reflect management's expectations as at the date of this news release and are subject to change after such date. Osisko Development disclaims any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, other than as required by law.

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.

Table 1: Cariboo Gold Project Lowhee Zone 2021 Length Weighted Drill Hole Gold Composites

| HOLE ID | FROM M | TO (M) | LENGTH (M) | AU G/T |
|----------------|---------------|---------------|-------------------|---------------|
| BM-21-001 | 206.20 | 207.15 | 0.95 | 3.22 |
| | 219.65 | 222.25 | 2.60 | 13.22 |
| INCLUDING | 219.65 | 220.15 | 0.50 | 45.40 |
| AND | 221.75 | 222.25 | 0.50 | 18.35 |
| | 226.80 | 227.95 | 1.15 | 3.11 |
| | 227.95 | 228.45 | 0.50 | 3.55 |
| | 233.55 | 234.05 | 0.50 | 4.78 |
| | 251.50 | 253.00 | 1.50 | 6.92 |
| INCLUDING | 251.50 | 252.00 | 0.50 | 17.05 |
| BM-21-002 | 127.25 | 133.80 | 6.55 | 6.14 |
| INCLUDING | 127.25 | 127.75 | 0.50 | 8.24 |
| AND | 130.55 | 131.15 | 0.60 | 43.70 |
| AND | 133.15 | 133.80 | 0.65 | 10.30 |
| | 194.70 | 195.20 | 0.50 | 9.56 |
| | 226.50 | 227.00 | 0.50 | 4.41 |
| | 272.30 | 275.95 | 3.65 | 4.78 |
| INCLUDING | 274.80 | 275.40 | 0.60 | 6.86 |
| AND | 275.40 | 275.95 | 0.55 | 13.45 |
| | 304.60 | 305.10 | 0.50 | 7.08 |
| | 434.95 | 435.65 | 0.70 | 25.70 |
| BM-21-003 | 42.00 | 43.15 | 1.15 | 7.28 |
| | 147.80 | 148.40 | 0.60 | 3.63 |
| | 220.00 | 220.55 | 0.55 | 6.30 |
| | 238.80 | 239.55 | 0.75 | 16.30 |
| | 351.00 | 351.50 | 0.50 | 12.95 |
| BM-21-004 | 135.50 | 136.50 | 1.00 | 4.41 |
| | 151.00 | 151.50 | 0.50 | 4.65 |
| | 188.00 | 188.50 | 0.50 | 3.77 |
| | 189.00 | 190.00 | 1.00 | 3.90 |
| BM-21-005 | 49.70 | 51.00 | 1.30 | 8.47 |
| | 141.00 | 141.50 | 0.50 | 5.11 |
| | 143.95 | 144.50 | 0.55 | 3.50 |
| | 183.85 | 184.40 | 0.55 | 5.55 |
| | 359.20 | 359.80 | 0.60 | 5.08 |
| | 381.55 | 383.50 | 1.95 | 8.88 |
| INCLUDING | 381.55 | 382.90 | 1.35 | 11.45 |
| BM-21-006 | 35.10 | 35.80 | 0.70 | 4.31 |
| | 38.00 | 38.50 | 0.50 | 8.96 |
| INCLUDING | 129.70 | 130.35 | 0.65 | 5.11 |
| AND | 131.70 | 132.35 | 0.65 | 4.57 |
| BM-21-007 | 191.20 | 191.70 | 0.50 | 5.63 |
| | 206.50 | 207.00 | 0.50 | 6.69 |

| | | | | | |
|-----------|-----------------------------|--------|--------|------|--------------|
| | | 216.20 | 216.75 | 0.55 | 3.63 |
| | | 234.45 | 234.95 | 0.50 | 5.06 |
| | | 253.80 | 254.50 | 0.70 | 6.19 |
| BM-21-008 | | 143.20 | 143.70 | 0.50 | 7.08 |
| | | 145.20 | 148.60 | 3.40 | 4.83 |
| | | 211.50 | 213.45 | 1.95 | 10.63 |
| | INCLUDING | 211.50 | 212.00 | 0.50 | 8.25 |
| | AND | 212.70 | 213.45 | 0.75 | 22.00 |
| BM-21-009 | | 46.50 | 47.15 | 0.65 | 3.96 |
| | | 147.40 | 152.00 | 4.60 | 2.23 |
| | INCLUDING | 147.40 | 148.00 | 0.60 | 11.25 |
| | AND | 151.50 | 152.00 | 0.50 | 3.68 |
| | | 173.50 | 174.00 | 0.50 | 7.28 |
| | | 271.65 | 272.15 | 0.50 | 9.75 |
| BM-21-010 | NO SIGNIFICANT ASSAYS | | | | |
| BM-21-011 | | 40.80 | 42.85 | 2.05 | 2.88 |
| | INCLUDING | 40.80 | 41.45 | 0.65 | 5.82 |
| | | 315.20 | 316.00 | 0.80 | 4.49 |
| | | 317.25 | 318.00 | 0.75 | 6.94 |
| BM-21-012 | | 153.00 | 153.70 | 0.70 | 8.41 |
| | | 161.90 | 162.40 | 0.50 | 18.15 |
| | | 206.50 | 207.00 | 0.50 | 12.75 |
| BM-21-013 | | 120.25 | 120.75 | 0.50 | 3.33 |
| | | 138.00 | 139.00 | 1.00 | 70.90 |
| | | 148.50 | 150.00 | 1.50 | 5.60 |
| BM-21-014 | | 147.50 | 148.75 | 1.25 | 11.57 |
| | INCLUDING | 148.25 | 148.75 | 0.50 | 26.20 |
| | | 163.40 | 164.50 | 1.10 | 7.22 |
| | INCLUDING | 163.40 | 163.95 | 0.55 | 11.25 |
| | | 232.40 | 232.95 | 0.55 | 14.95 |
| BM-21-015 | | 182.90 | 190.50 | 7.60 | 6.26 |
| | INCLUDING | 182.90 | 183.50 | 0.60 | 15.70 |
| | AND | 183.50 | 184.00 | 0.50 | 17.00 |
| | AND | 185.50 | 186.00 | 0.50 | 11.60 |
| | AND | 189.10 | 189.95 | 0.85 | 22.00 |
| BM-21-016 | | 155.85 | 156.40 | 0.55 | 4.47 |
| | | 163.55 | 164.10 | 0.55 | 6.75 |
| | | 180.50 | 184.55 | 4.05 | 7.97 |
| | INCLUDING | 183.50 | 184.00 | 0.50 | 58.80 |
| | | 192.60 | 193.10 | 0.50 | 6.38 |
| | | 195.25 | 196.45 | 1.20 | 7.27 |
| | | 203.50 | 204.50 | 1.00 | 21.10 |
| | | 233.75 | 234.50 | 0.75 | 3.99 |
| | | 256.00 | 256.60 | 0.60 | 7.27 |

| | | | | | |
|-----------|-----------|--------|--------|------|--------------|
| | | 288.00 | 288.80 | 0.80 | 3.92 |
| BM-21-017 | | 34.50 | 35.00 | 0.50 | 4.54 |
| | | 48.50 | 49.00 | 0.50 | 3.40 |
| | | 67.00 | 68.00 | 1.00 | 6.46 |
| | | 73.00 | 76.50 | 3.50 | 4.93 |
| | INCLUDING | 73.00 | 73.50 | 0.50 | 24.80 |
| | AND | 76.00 | 76.50 | 0.50 | 9.66 |
| | | 121.40 | 122.50 | 1.10 | 41.39 |
| | | 121.40 | 122.00 | 0.60 | 70.20 |
| | | 129.00 | 129.50 | 0.50 | 3.86 |
| | | 198.00 | 199.00 | 1.00 | 4.18 |
| BM-21-018 | | 43.75 | 44.60 | 0.85 | 39.40 |
| | | 48.30 | 49.40 | 1.10 | 4.91 |
| | INCLUDING | 65.80 | 67.00 | 1.20 | 4.96 |
| | AND | 68.80 | 69.50 | 0.70 | 4.62 |
| | AND | 71.50 | 72.00 | 0.50 | 10.95 |
| | | 85.00 | 85.50 | 0.50 | 4.68 |
| | | 88.60 | 91.00 | 2.40 | 3.66 |
| | | 171.10 | 172.00 | 0.90 | 6.07 |
| | | 228.50 | 229.00 | 0.50 | 4.67 |

Table 2: Drill Hole Locations and Orientations

| HOLE ID | EASTING | NORTHING | ELEV | DIP | AZI | DEPTH (M) |
|-----------|---------|----------|------|-----|-----|-----------|
| BM-21-001 | 596552 | 5882836 | 1454 | -51 | 302 | 303 |
| BM-21-002 | 596556 | 5882840 | 1453 | -45 | 300 | 513 |
| BM-21-003 | 596553 | 5882838 | 1456 | -53 | 298 | 369 |
| BM-21-004 | 596496 | 5882909 | 1428 | -51 | 307 | 494 |
| BM-21-005 | 596556 | 5882842 | 1456 | -49 | 308 | 420 |
| BM-21-006 | 596554 | 5882840 | 1455 | -49 | 303 | 134 |
| BM-21-007 | 596556 | 5882840 | 1454 | -52 | 297 | 354 |
| BM-21-008 | 596496 | 5882909 | 1427 | -60 | 306 | 252 |
| BM-21-009 | 596556 | 5882841 | 1452 | -52 | 309 | 411 |
| BM-21-010 | 596495 | 5882908 | 1427 | -52 | 283 | 192 |
| BM-21-011 | 596554 | 5882839 | 1454 | -56 | 307 | 323 |
| BM-21-012 | 596496 | 5882908 | 1427 | -58 | 288 | 240 |
| BM-21-013 | 596496 | 5882909 | 1429 | -46 | 269 | 180 |
| BM-21-014 | 596555 | 5882840 | 1455 | -52 | 306 | 240 |
| BM-21-015 | 596496 | 5882910 | 1427 | -55 | 319 | 276 |
| BM-21-016 | 596556 | 5882842 | 1457 | -50 | 312 | 348 |
| BM-21-017 | 596552 | 5882746 | 1465 | -55 | 293 | 270 |
| BM-21-018 | 596552 | 5882746 | 1466 | -56 | 301 | 249 |