## NEWS RELEASE

# Bonanza

TSX Venture Exchange Trading Symbol: BZA

## AMERICAN BONANZA ENCOUNTERS MULTI-OUNCE GOLD GRADES IN UNDERGROUND SAMPLES AT <u>COPPERSTONE</u>

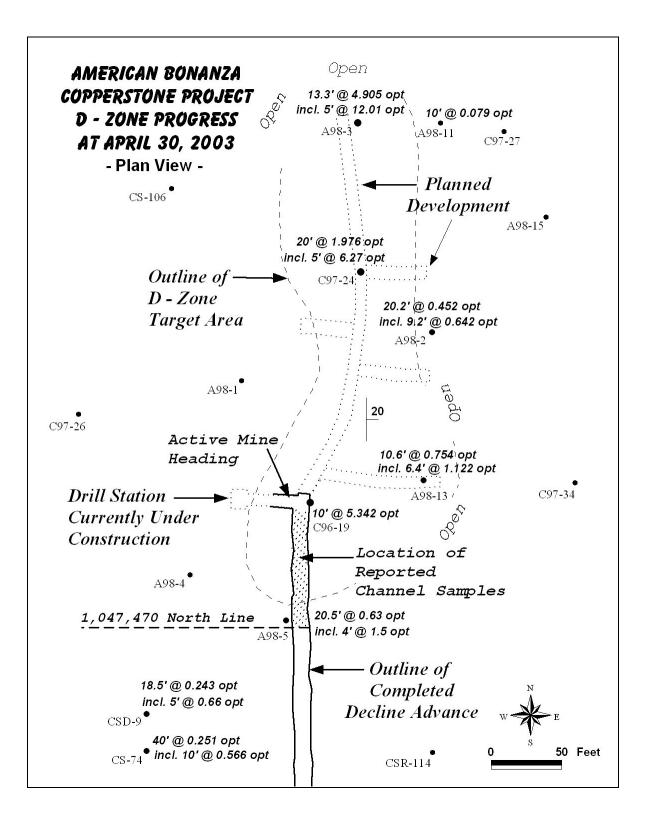
May 5, 2003- AMERICAN BONANZA GOLD MINING CORP. ("Bonanza") is delighted to announce that the underground decline at the Copperstone Project in Arizona has encountered very high gold grades in the initial target: the southern portion of the D-Zone.

North of gridline 1,047,470 North, (please refer to the attached plan map) a total of 42 channel samples were collected from face and rib exposures during the mining of eight rounds covering 80 linear feet. The channel sampling is designed to characterize the mineralization of various rock types. All samples contain gold, and sample values range to a high of 11.5 ounces per ton ("opt") gold and average 1.2 opt gold; a complete listing of the assay results is provided as part of this news release, in the table below.

Significant multi-ounce channel samples include 4.5 feet grading 9.1 opt gold, 1.5 feet grading 11.5 opt gold, 6.4 feet grading 4.1 opt gold, 9.5 feet grading 4.1 opt gold, 2.1 feet grading 3.6 opt gold, 2.1 feet grading 3.2 opt gold, and 5.1 feet grading 2.9 opt gold.

Underground channel sampling confirms the gold mineralization in the initial drill hole within the D-Zone encountered to date by the underground development. Drill hole C96-19 is a core hole drilled from surface that lies within the D-Zone, about 80 feet North of the southern margin of the D-Zone. Drill hole C96-19 represents Bonanza's initial target within the D-Zone and contains 10 feet grading 5.3 opt gold, as previously announced. Channel sampling from the same mining round that exposes drill hole C96-19 in the back of the underground workings (about 5 feet south of drill hole C96-19) returned values of 9.5 feet grading 4.1 opt gold, 4.5 feet grading 9.1 opt gold, and 4 feet grading 1.9 opt gold – which confirms the very high gold content of drill hole C96-19, with locally higher grades.

As expected, routine channel sampling south of gridline 1,047,470 North (south of the D-Zone) did not return significant gold assays as this area lies outside of the D-Zone target area. A comprehensive panel sampling program has commenced to characterize the gold grade of the mineralized horizons, and design of an assay protocol tailored for very high grade samples has begun, which will examine the performance of metallic screen fire assays, multi-assays, and/or large assay charges up to 5 assay ton charges. Future sampling will focus on panel samples using the very high grade assay process.



The underground workings at Copperstone now extend over 1,800 feet northward from the portal site at the northern end of the Copperstone Open Pit and provide access to the D-Zone mineralization.

Brian Kirwin, Bonanza's President and CEO stated: "These impressive results support the Company's view of the very high grade potential of Copperstone. Completion of the decline into the D-Zone and the confirmation of the mineralization indicated by surface drill holes represent major milestones in the development of the Copperstone project."

The attached underground plan map of the D-Zone provides a current picture of progress at the D-Zone. Completion of the decline to this point was recently delayed as ground conditions were encountered that required extra ground support for safety. Bonanza has established an effective stabilization program for these localized conditions and will schedule accordingly.

Intensely sheared, altered and replaced rock has been encountered in the decline within the D-Zone. Alteration is consistent with alteration visible in the very high grade intervals in the core holes previously drilled from surface which currently define the D-Zone.

Surface drilling indicates that the Copperstone Fault in the D-Zone is thought to be from ten (10) to forty (40) feet thick; none of the channel sampling to date tests the true thickness of the target zone. The decline has been designed to intersect the Copperstone Fault in the D-Zone at the mineralized interval within drill hole C96-19. In other areas, the high grade portions of the Copperstone Fault may be above or below the decline and will be defined by underground core drilling.

Currently a cross cut is being driven westward to establish an underground drill station. Underground sampling programs continue in the active mine heading. An underground core drilling rig will be mobilized to Copperstone after the drill station development is complete. Extensive core drilling from underground will locate and define the grade profile of the Copperstone Fault in the D-Zone and is scheduled to commence during May.

Subsequent underground core drilling, drifting, cross-cutting and sampling will provide detailed assay and geologic data describing the D-Zone. This detailed data is planned to be sufficient to refine the D-Zone resource estimation into reserve-level definition. This work comprises the next stage of underground work at Copperstone, and has already begun.

Channel Sample Number	Sample Length (feet)	Gold Grade (opt Au)	Channel Sample Number	Sample Length (feet)	Gold Grade (opt Au)	
North end of sampling, adjacent to DH#C96-19						
9077	9.5	4.07	1718	2.7	0.41	
9078	4.0	1.90	1719	2.8	0.55	
9079	4.5	9.09	1720	2.8	0.04	
1761	2.1	0.15	1716	1.7	0.20	
1759	5.1	2.86	1721	0.5	0.14	
1758	2.7	0.34	1762	2.1	3.58	
1754	5.6	0.31	1740	1.5	11.54	
1756	0.5	0.06	1741	2.5	0.58	
1757	2.6	0.07	1742	1.0	0.08	
1732	1.8	0.02	1743	1.6	0.01	
1733	1.4	0.01	1710	6.4	4.12	
1734	2.0	0.01	1696	2.7	0.15	
1735	1.4	0.42	1695	2.6	0.29	
1736	1.1	0.17	1691	2.9	0.06	
1737	5.0	0.07	1692	3.0	0.27	
1738	3.1	0.13	1694	2.8	0.03	
1739	3.2	0.05	1693	3.1	0.09	
1729	1.9	0.02	1687	4.1	0.03	
1728	2.2	2.68	1688	1.8	0.23	
1727	4.6	0.93	1689	2.8	0.30	
1717	2.1	3.22	1686	1.1	0.03	
			South end of	South end of sampling: 1,047,470 North		

A summary of assay results from the channel samples is as follows, presented generally from North to South, with grades over 0.1 opt gold highlighted for convenience:

### **DETAILED INFORMATION**

The Copperstone gold mineralization occurs within a package of sedimentary and volcanic rocks, in northwest striking, moderate to shallow dipping fault zones, principally the Copperstone Fault. Intensely sheared, altered and replaced rock characterizes the Copperstone Fault in the vicinity of the D-Zone. Alteration consisting of intense hematite and magnetite replacement, chloritization and silicification has been observed in the Copperstone Fault underground and is consistent with alteration visible in the very high grade intervals in the core holes previously drilled from surface which currently define the D-Zone.

Gold mineralization is restricted to these fault zones, with little to no gold mineralization present in the wallrocks. Future exploration and development efforts will target these mineralized faults to follow up along strike and dip from the current results and previously drilled mineralization.

Mining services were provided by a mining contractor, Merritt Construction Company of Kingman Arizona, under direct supervision of Bonanza personnel. The current heading is designed to be 11 feet wide by 12 feet high. The sampling and assaying were conducted by Bonanza personnel under the supervision of Gregory French, CPG #10708, a Qualified Person as defined in Canadian National Instrument 43-101.

The channel samples were collected by Bonanza personnel at the face of each mining round, and were selected on a geological basis to characterize the gold mineralization associated with various rock types, alteration types and structural horizons. Because the channel sampling was designed to characterize the gold mineralization of various rock types, some samples were collected specifically to confirm that some particular rock types do not contain gold.

The channel samples were collected at assorted orientations, and generally are perpendicular to the feature characterized. Because the Copperstone Fault dips gently to the east, many channel samples were collected from a near vertical channel.

The channel samples average 2.8 feet in length, with a minimum of 0.5 feet and a maximum length of 9.5 feet. Sample sizes range between 10 and 20 pounds, averaging 15 pounds. True thickness of the Copperstone Fault at the D-Zone is thought to be from ten (10) to forty (40) feet thick from surface drilling, and none of the channel sampling to date tests the true thickness of the target zone. Approximately five samples were collected from the face and rib of each mining round (predominantly the samples were collected from the face). The general spacing of samples is as follows: approximately five samples were collected at each face, and spacing between the mining faces averages ten feet.

The channel samples were bagged, labeled and tied at the Copperstone project site by Bonanza personnel. Reference samples for each interval were collected and stored in plastic bags. Geologic information was recorded on standardized sample description forms which included color, rock type, alteration, mineral species and abundance.

Samples were collected at the end of each day and stored in a secure facility at the Copperstone project site. Two or three times weekly Bonanza personnel transported the samples to America West Airlines' airfreight desk at the regional airport at Lake Havasu City, Arizona.

America West Airlines transported the samples to the airport in Reno, Nevada. There, representatives of American Assay Laboratories (AAL) in Sparks, Nevada received the samples and took custody of the samples. AAL is ISO / IEC 17025 certified and has successfully completed Canadian proficiency testing (CCRMP).

At the AAL laboratory, the channel samples were dried, crushed to -10 mesh, pulverized to -150 mesh, split to 1,000 gram pulps, fire assayed for gold and silver using 1- and 2-assay ton fire assay with a gravimetric finish. All samples greater than 0.100 opt, standards, and blanks were submitted to additional labs for verification. A total of 42 channel samples were sent for assay, and a total of 75 additional check assays were performed on these samples (for a total of 117 individual assays for these channel samples); the very high grade samples were thoroughly checked. An additional routine 27 duplicate, standard and blank assays were performed.

Check assays were submitted to BSI-Inspectorate, Sparks, NV and Chemex Labs, Sparks, NV for 2-assay ton gold analysis. Both labs are ISO 9002 certified. AAL or Bonanza personnel delivered the samples to the check labs.

#### ABOUT AMERICAN BONANZA

American Bonanza is engaged in the acquisition, exploration and development of highgrade gold properties. Bonanza's metallogenic exploration techniques represent state-ofthe-art tools for modern exploration in the Great Basin of the American Southwest, and will be the catalyst for future corporate growth.

### AMERICAN BONANZA GOLD MINING CORP.

(signed) Brian Kirwin President and Chief Executive Officer

The TSX Venture Exchange has not reviewed and does not accept responsibility for the adequacy or accuracy of this news release.

For further information call or write:

Brian Kirwin, President and Chief Executive Officer (775) 824-0707 Giulio T. Bonifacio, Executive Vice President and Chief Financial Officer (604) 699-0023