

# Murchison Minerals Appoints Dr. Stephen Piercey as Technical Advisor and Provides an Update on the BMK Zinc-Copper-Silver-Lead-Gold Project

written by Raj Shah | June 7, 2023

June 7, 2023 ([Source](#)) – *Highlights*

- *Appoints VMS expert, Dr. Stephen Piercey, as technical advisor for BMK VMS Project.*
- *Review of the BMK Deposit indicates strong potential for a copper-rich stockwork zone (Figure 2). This would be similar in style to Foran Mining's McIlvenna Bay Deposit, where a significant copper stockworks zone, associated with the zone of zinc-rich massive sulphide was discovered.*
- *VMS systems typically form in clusters, and the BMK Deposit is the only VMS deposit that has been discovered and delineated at the BMK Project. However, VMS-style mineralization has been discovered at numerous targets along the BMK Trend (Figure 1), including:*
  - *Main Lake where a 0.89 m backpack drillhole intersected 8.31% Zn, 6.17% Cu, 140 g/t Ag, and 0.2 g/t Au*
  - *Betty Zone where diamond drilling intersected 0.92 m grading 4.40% Zn, 1.33% Cu, and 12.95 g/t Ag*
  - *The BMK Trend is highly prospective for the discovery of additional copper-zinc rich VMS deposits.*

- *Identification of the BMK Trend, a ~37 km strike length of favourable stratigraphy and VMS style mineralization, extending from Main Lake Target in the South to the Street Lake Target in the North.*
- *The Company has staked an additional ~75 km<sup>2</sup> of claims along strike to the northwest of the main BMK Project area, encompassing the entire prospective BMK Trend.*
- *The BMK Project area now totals ~655 km<sup>2</sup>, with excellent existing infrastructure directly adjacent to the project area.*

**Murchison Minerals Ltd.** (“Murchison” or the “Company”) (TSXV:MUR) (OTCQB:MURMF) is pleased to announce that it has appointed renowned volcanogenic massive sulfide (VMS) deposits expert Dr. Stephen Piercey as technical advisor for the 100% owned Brabant-McKenzie (BMK) project located in Saskatchewan, Canada. Based on the work Dr. Piercey and Murchison’s technical team completed this Spring the Company believes that the BMK Deposit area is prospective to host a copper-rich stockwork zone, similar in style to Foran Mining’s McIlvenna Bay Project. Additionally, Murchison’s technical team has identified a 37 km trend (BMK Trend) which has numerous showings of VMS mineralization, leading to the high potential of discovering further VMS deposits along strike of the BMK Deposit. Accordingly, Murchison has staked an additional 75 km<sup>2</sup> of mineral claims encompassing the entire BMK Trend.



**Figure 1:** *Location map of BMK Deposit and prospective targets along strike. BMK Deposit resource estimate is based on a NI 43-101 dated September 4, 2018. Prepared by Finley Bakker Consulting, Campbell River, BC, and Murchison Minerals Ltd.*

**Dr. Stephen Piercey:**

Dr. Piercey has conducted extensive research and field work, internationally and across Canada, focusing on VMS deposits and their origins. Dr. Piercey is University Research Professor in the Department of Earth Sciences at Memorial University as well as a part-time consultant with SJPGeoConsulting out of St. John's, NFLD. He is a previous winner of the Lindgren Medal (SEG), W.H. Gross Medal (MDD-GAC), Howard Street Robinson Medal (MDD-GAC), Hutchison Medal (GAC), and the Duncan Derry Medal (MDD-GAC). Presently, Dr. Piercey is the President Elect of the Society of Economic Geologists, is a Professional Geoscientist (PGeo) in Newfoundland and Labrador, Ontario, and Saskatchewan, and was awarded Fellow of Geoscientists Canada for his contributions to the geoscience profession in Canada.

#### **Brabant-McKenzie VMS Project Review:**

During the Spring of 2023 Murchison Minerals, with the assistance of Dr. Piercey, completed the systematic relogging and sampling of historic drill core at the BMK Deposit, as well as at the regional targets called Main Lake, Betty, T2T and TOM2. The work has successfully identified the BMK Deposit as a felsic volcanoclastic-type of VMS deposit, which is similar to those in the past-producing, high tonnage Bathurst VMS Mining Camp in New Brunswick. These sediment-rich VMS environments host some of the highest tonnage VMS deposits globally. The Bathurst-type VMS deposits typically have abundant zinc-rich sulfides that are underlain by a copper-rich stockwork "feeder" zones. It is inferred that one may exist proximal to the BMK Deposit or within the region. A top priority for the Company is locating the copper-rich zone at the BMK Deposit.

The relogging work has also identified the volcanoclastic stratigraphy (37 km strike length) that hosts the BMK Deposit, termed the BMK Trend. Murchison currently has multiple targets along the BMK Trend (Figure 4) which include the Betty and Main

Lake targets. At the Main Lake and Betty targets, Murchison discovered initial VMS mineralization in 2020 and 2021 (Table 2). The BMK Deposit and the Betty and Main Lake Targets remain open and are ideally located adjacent to a provincial highway and power. The company has staked an additional 7487 hectares of claims, encompassing the entire prospective BMK Trend. The BMK Project now has area comprising 65,501 hectares or 655 km<sup>2</sup>.

***Murchison Minerals President and CEO Troy Boisjoli comments:***

*“I would like to welcome Dr. Stephen Piercy as a technical advisor to Murchison Minerals. Dr. Piercy recently visited our BMK project in Saskatchewan, where he has helped to further our technical team’s understanding and approach to unlocking the copper potential at BMK. Polymetallic VMS deposits, like BMK, are some of the world’s most important sources of key critical minerals. These deposit types tend to occur in clusters, where on the average Canadian VMS camp contains nine deposits. The BMK Deposit is the first zone of mineralization that’s been discovered and delineated along the 37 km BMK Trend; however, our technical team has already discovered numerous additional showings of VMS mineralization within the BMK Trend. As the world continues to transition away from fossil fuels, critical minerals projects, like BMK, will help source the metals needed to power that future. “*

***Dr. Stephen Piercey comments:***

*“The geological setting of the BMK Deposit is similar to other volcanoclastic-hosted deposits globally, including deposits in the Bathurst Mining Camp in New Brunswick. In many cases, volcanoclastic- and sediment-rich environments host high tonnage VMS deposits. Moreover, the high zinc grades found at BMK are common to zone-refined VMS deposits, where zinc-rich zones are frequently underlain by copper-rich stockwork/feeder zones. That*

*these copper-rich zones have yet to be identified in the Brabant Lake region is interesting, but not surprising given the structural/metamorphic setting of the belt. Nevertheless, it suggests that such zones be present in the region and should be considered high priority exploration targets."*

**Table 1 – Highlight Drill Intercepts from BMK Deposit**

| Hole     |                 | From<br>(m)   | To (m)        | Length*<br>(m) | Cu %        | Zn %         | Pb %        | Ag g/t        | Au<br>g/t   |
|----------|-----------------|---------------|---------------|----------------|-------------|--------------|-------------|---------------|-------------|
| BM21-004 |                 | 341.20        | 356.55        | 15.35          | 0.81        | 9.07         | 0.26        | 35.11         | 0.11        |
|          | <b>Includes</b> | <b>341.20</b> | <b>343.70</b> | <b>2.50</b>    | <b>0.37</b> | <b>12.48</b> | <b>0.02</b> | <b>17.38</b>  | <b>0.05</b> |
|          | <b>Includes</b> | <b>346.70</b> | <b>348.70</b> | <b>2.00</b>    | <b>0.44</b> | <b>13.89</b> | <b>0.02</b> | <b>17.35</b>  | <b>0.06</b> |
|          | <b>Includes</b> | <b>352.00</b> | <b>356.55</b> | <b>4.55</b>    | <b>0.87</b> | <b>14.39</b> | <b>0.04</b> | <b>29.70</b>  | <b>0.10</b> |
| BR08-48  |                 | 333.90        | 348.40        | 14.50          | 0.61        | 3.61         | 2.15        | 85.98         | 0.40        |
|          | <b>Includes</b> | <b>343.90</b> | <b>348.40</b> | <b>4.50</b>    | <b>0.90</b> | <b>4.31</b>  | <b>5.32</b> | <b>161.89</b> | <b>0.77</b> |
| BR07-33  |                 | 237.50        | 244.70        | 7.20           | 1.36        | 14.70        | 0.11        | 48.24         | 0.39        |
|          | <b>Includes</b> | <b>237.50</b> | <b>239.80</b> | <b>2.30</b>    | <b>1.53</b> | <b>23.08</b> | <b>0.03</b> | <b>50.43</b>  | <b>0.78</b> |
| BR07-18  |                 | 239.05        | 256.88        | 17.83          | 0.64        | 5.84         | 0.78        | 80.93         | 1.01        |
|          | <b>Includes</b> | <b>239.05</b> | <b>242.45</b> | <b>3.40</b>    | <b>0.60</b> | <b>20.26</b> | <b>0.02</b> | <b>51.87</b>  | <b>0.02</b> |
|          |                 | <b>252.86</b> | <b>255.00</b> | <b>2.14</b>    | <b>0.69</b> | <b>0.13</b>  | <b>3.32</b> | <b>378.69</b> | <b>7.07</b> |
| BR07-8   |                 | 234.69        | 239.54        | 4.85           | 0.72        | 5.64         | 0.10        | 20.63         | 0.03        |
|          |                 | 265.04        | 279.44        | 14.40          | 0.63        | 9.16         | 0.17        | 24.37         | 0.12        |
|          | <b>Includes</b> | <b>265.04</b> | <b>268.36</b> | <b>3.32</b>    | <b>0.85</b> | <b>22.91</b> | <b>0.01</b> | <b>23.05</b>  | <b>0.11</b> |
|          |                 | 281.44        | 286.62        | 5.18           | 0.62        | 1.77         | 0.79        | 61.59         | 0.16        |
|          |                 | 288.93        | 291.76        | 2.83           | 0.34        | 7.84         | 0.08        | 16.47         | 0.02        |
| BR06-1   |                 | 399.94        | 411.30        | 11.36          | 0.51        | 9.61         | 0.81        | 52.13         | 0.31        |
|          | <b>Includes</b> | <b>400.94</b> | <b>406.10</b> | <b>5.16</b>    | <b>0.84</b> | <b>21.03</b> | <b>0.03</b> | <b>47.78</b>  | <b>0.13</b> |

|       |                  |               |               |              |             |              |             |              |             |
|-------|------------------|---------------|---------------|--------------|-------------|--------------|-------------|--------------|-------------|
| 88-12 |                  | 288.85        | 297.10        | 8.25         | 0.38        | 2.74         | 1.34        | 63.30        | 0.46        |
|       | <b>Includes</b>  | <b>291.20</b> | <b>296.50</b> | <b>5.30</b>  | <b>0.46</b> | <b>2.61</b>  | <b>1.55</b> | <b>72.42</b> | <b>0.56</b> |
|       |                  | 320.60        | 341.46        | 20.86        | 0.64        | 3.43         | 0.76        | 42.31        | 0.60        |
|       | <b>Includes</b>  | <b>324.80</b> | <b>341.46</b> | <b>16.66</b> | <b>0.72</b> | <b>4.04</b>  | <b>0.94</b> | <b>52.97</b> | <b>0.75</b> |
|       | <b>Including</b> | <b>334.60</b> | <b>335.80</b> | <b>1.20</b>  | <b>0.63</b> | <b>25.60</b> | <b>0.24</b> | <b>38.30</b> | <b>0.01</b> |
|       | <b>Includes</b>  | <b>330.00</b> | <b>341.46</b> | <b>11.46</b> | <b>0.75</b> | <b>5.09</b>  | <b>1.35</b> | <b>74.16</b> | <b>1.09</b> |

*\* Reported as core length, true thickness varies between 70-95%.*

**Table 2 – 2020 and 2021 Highlight Exploration Results from Betty and Main Lake Targets**

| Hole     |                 | From (m)      | To (m)        | Length* (m) | Cu %        | Zn %        | Pb %        | Ag g/t       | Au g/t      |
|----------|-----------------|---------------|---------------|-------------|-------------|-------------|-------------|--------------|-------------|
| BZ21-002 |                 | <b>280.73</b> | <b>281.65</b> | <b>0.92</b> | <b>1.33</b> | <b>4.40</b> | <b>0.00</b> | <b>12.95</b> | <b>0.07</b> |
| BZ21-004 |                 | 396.63        | 397.65        | 1.02        | 0.08        | 3.01        | 0.03        | 3.68         | 0.04        |
|          |                 | 398.96        | 399.33        | 0.37        | 0.14        | 3.20        | 0.08        | 9.00         | 0.03        |
| ML20-004 |                 | 140.23        | 143.24        | 3.01        | 0.96        | 0.50        | 0.01        | 13.97        | 0.03        |
|          | <b>Includes</b> | <b>141.00</b> | <b>142.26</b> | <b>1.26</b> | <b>1.35</b> | <b>0.12</b> | <b>0.01</b> | <b>20.08</b> | <b>0.03</b> |
|          |                 | 169.80        | 176.42        | 6.62        | 0.09        | 1.62        | 0.15        | 41.12        | 0.06        |
|          | <b>Includes</b> | <b>170.62</b> | <b>171.64</b> | <b>1.02</b> | <b>0.15</b> | <b>5.08</b> | <b>0.05</b> | <b>26.88</b> | <b>0.08</b> |
|          | <b>Includes</b> | <b>176.20</b> | <b>176.42</b> | <b>0.22</b> | <b>0.03</b> | <b>9.77</b> | <b>0.05</b> | <b>56.50</b> | <b>0.02</b> |
| ML21-002 |                 | 149.56        | 153.15        | 3.59        | 0.36        | 0.85        | 0.01        | 8.50         | 0.03        |
|          | <b>Includes</b> | <b>152.68</b> | <b>153.15</b> | <b>0.47</b> | <b>0.20</b> | <b>3.60</b> | <b>0.00</b> | <b>6.61</b>  | <b>0.07</b> |
|          |                 | 179.58        | 180.59        | 1.01        | 0.04        | 4.71        | 0.02        | 21.20        | 0.00        |

*\* Reported as core length, true thickness unknown.*



**Figure 2:** Schematic of an anoxic VMS Deposit at formation and pre-metamorphic deformation. It is now inferred that Copper Rich Stockwork for the BMK Deposit has not yet been found and is a top exploration priority. Image modified from Figure 4, Tornos

et al 2015, Source: Controls on the siting and style of volcanogenic massive sulphide deposits, Ore Geology Reviews 68, (2015) 142-163



**Figure 3: BMK Location Map**



**Figure 4: BMK Target Location Map**

**Table 3 – Drill Collar Table**

| Hole            | Easting<br>UTM* | Northing<br>UTM* | Elevation<br>(m) | Azimuth<br>(°) | Dip<br>(°) | Length<br>(m) |
|-----------------|-----------------|------------------|------------------|----------------|------------|---------------|
| <b>BM21-004</b> | 580637          | 6221091          | 381              | 120            | -70        | 391.5         |
| <b>BR08-48</b>  | 580739          | 6221246          | 380              | 120            | -65        | 365           |
| <b>BR07-33</b>  | 580859          | 6221157          | 382              | 120            | -75        | 275           |
| <b>BR07-18</b>  | 580835          | 6221113          | 382              | 120            | -75        | 311           |
| <b>BR07-8</b>   | 580802          | 6221110          | 383              | 120            | -75        | 317.2         |
| <b>BR06-1</b>   | 580707          | 6221246          | 380              | 120            | -75        | 435           |
| <b>88-12</b>    | 580715          | 6221153          | 382              | 120            | -65        | 392           |
| <b>BZ21-002</b> | 582068          | 6222700          | 396              | 130            | -71        | 330           |
| <b>BZ21-004</b> | 581941          | 6222704          | 401              | 120            | -70        | 473           |
| <b>ML20-004</b> | 574754          | 6212447          | 383              | 110            | -72        | 234           |
| <b>ML21-002</b> | 574757          | 6212485          | 410              | 110            | -70        | 330           |

*\*UTM Projected Coordinate System: NAD83 UTM Zone 13N*

### **Qualifying Statement**

The foregoing scientific and technical disclosures on the BMK Project have been reviewed by John Shmyr, P.Geo., VP Exploration, a registered member of the Professional Engineers and Geoscientists of Saskatchewan. Mr. Shmyr is a Qualified Person as defined by National Instrument 43-101. The Qualified Person has verified the data disclosed in this release, including sampling, analytical and test data underlying the

information contained in this release. Mr. Shmyr consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Some data disclosed in this News Release relating to sampling and drilling results is historical in nature. Neither the Company nor a qualified person has yet verified this data and therefore investors should not place undue reliance on such data. In some cases, the data may be unverifiable due to lack of drill core. Mineralization hosted on adjacent and/or nearby and/or geologically similar properties is not necessarily indicative of mineralization hosted on the Company's properties.

#### **About Murchison Minerals Ltd. (TSXV:MUR, OTCQB:MURMF)**

Murchison is a Canadian-based exploration Company focused on nickel-copper-cobalt exploration at the 100% – owned HPM Project in Quebec and the exploration and development of the 100% – owned Brabant Lake zinc-copper-silver project in north-central Saskatchewan. Murchison currently has 218.2 million shares issued and outstanding.

Additional information about Murchison and its exploration projects can be found on the Company's website at [www.murchisonminerals.ca](http://www.murchisonminerals.ca). For further information, please contact:

Troy Boisjoli, President and CEO,  
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#### ***Forward-Looking Information***

*The content and grades of any mineral deposits at the Company's*

*properties are conceptual in nature. There has been insufficient exploration to define a mineral resource on the property and it is uncertain if further exploration will result in any target being delineated as a mineral resource.*

Certain information set forth in this news release may contain forward-looking information that involves substantial known and unknown risks and uncertainties. This forward-looking information is subject to numerous risks and uncertainties, certain of which are beyond the control of the Company, including, but not limited to, the impact of general economic conditions, industry conditions, and dependence upon regulatory approvals. FLI herein includes, but is not limited to: future drill results; stakeholder engagement and relationships; parameters and methods used with respect to the assay results; the prospects, if any, of the deposits; future prospects at the deposits; and the significance of exploration activities and results. FLI is designed to help you understand management's current views of its near- and longer-term prospects, and it may not be appropriate for other purposes. FLI by their nature are based on assumptions and involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by such FLI. Although the FLI contained in this press release is based upon what management believes, or believed at the time, to be reasonable assumptions, the Company cannot assure shareholders and prospective purchasers of securities of the Company that actual results will be consistent with such FLI, as there may be other factors that cause results not to be as anticipated, estimated or intended, and neither the Company nor any other person assumes responsibility for the accuracy and completeness of any such FLI. Except as required by law, the Company does not undertake,

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**SOURCE:** Murchison Minerals Ltd.