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## Cannabix Technologies Files Patent for Proprietary Laboratory Drug Analysis Device

Vancouver, British Columbia, January 3, 2024 -- Cannabix Technologies Inc. (CSE: BLO) (OTC PINK: BLOZF) (the “Company or Cannabix”) developer of marijuana and alcohol breath testing devices reports that it has filed a provisional patent application titled, “Sample Delivery Systems and Methods for Low Volatility Analytes Obtained from Breath”. This provisional patent application covers new innovations and intellectual property related to the detection of low and semi-volatile substances (like delta-9 THC) using its proprietary Mass Spectrometer Breath Sampler (“MSBS”) technology. The MSBS is an innovative hardware device which allows for direct desorption of human breath samples into a mass spectrometer without the need for any pre-preparation (see Figure 1). The MSBS substantially simplifies laboratory analysis methods, reduces sample turnaround times (within a few minutes), and provides a truly novel method for drug screening using breath.

### Highlights and Updates:

- The Company has filed a new provisional patent for its MSBS related technology allowing for the rapid analysis of human breath for difficult to detect, non-volatile compounds in breath (like delta-9 THC).
- Cannabix’s MSBS technology along with the Breath Collection Unit (“BCU”) (see Figure 2) have been providing consistent results in the detection of delta-9 THC in breath from smoking and THC infused edibles consumption.
- Cannabix has been using the MSBS to quantify delta-9 THC in human breath samples. Currently, a limit of detection and limit of quantification have been achieved with human subjects in the low picogram range. This allows detection of THC from smoking and edibles up to 4 hours after consumption.
- Cannabix is advancing discussions with industry leading forensic laboratory organizations on how to best integrate its novel MSBS hardware into current forensic testing and analysis methods.
- Effective January 1, 2024, new legislative measures, California Assembly Bill 2188 (AB 2188), Senate Bill 700 (SB 700), and Washington State Senate Bill 5123 (SB 5123), now restrict employers from taking adverse actions against job applicants based on their off-duty use of cannabis or on the results of pre-employment drug tests that find non-psychoactive cannabis metabolites (1). Cannabix’s marijuana breathalyzer system (using the BCU and MSBS) has been specifically built to detect *recent cannabis use* – detecting Delta-9 THC, the active, psychoactive compound in cannabis – using breath samples, within 1-4 hours after consumption.



*Fig. 1 Cannabix “MS Breath Sampler (MSBS)” technology coupled with Thermo TSQ Ultra*



*Fig. 2 Cannabix updated Breath Collection Unit (BCU)*

The new provisional patent covers various novel aspects for efficient analysis of low volatility analytes from human breath developed by the Company. The patent includes the unique internal geometry of the sampler that has been optimized to maximize the delivery of the analyte. Combined with liquid secondary adsorption (LSA), the concept behind the sample capture and release, the MSBS has repeatedly demonstrated efficient detection of delta-9 THC. This is a unique capability in that current methods focus mostly on volatile analytes in breath, while the non-volatile components can provide much more additional information about the subject – not only marijuana use but also for example health related biomarkers. Cannabix has been continuously improving collection efficiency of the BCU, and sample transfer efficiency of the MSBS such that the results are comparable or better relative to conventional liquid chromatography-mass spectrometry (LC-MS) forensic methods, which are often time-consuming and expensive.

### **MSBS Technology and BCU**

The Company’s mass spectrometer coupled laboratory “MS Breath Sampler” (Figure 1) and handheld Breath Collection Unit (“BCU”, Figure 2) are being used together to provide a new method for drug detection that complements gold-standard mass spectrometry with sample collection taking about 2 minutes and the complete sample analysis from start to finish taking less than 5 minutes. This equipment significantly simplifies laboratory analysis methods, reduces sample turnaround times (thus minimizing operating costs), while maintaining sensitive, precise results.

### **MSBS compared to legacy LCMS methods**

The MSBS is a novel method for efficient collection of analytes of low volatility from human breath utilizing LSA technique. The LSA concept has successfully demonstrated efficient capturing and releasing of THC using the breath aerosol as a carrier of viscous liquid particle analytes as well as a secondary adsorbent to prevent sample loss from surface contact deposition. Legacy conventional quantifying methods rely on the use of complex time-consuming liquid chromatography-mass spectrometry (LC-MS) research-based methods which require multiple preparation steps (e.g., solvent extraction and preconcentration) that are plagued with sample loss. This type of analysis is complex and can take hours to perform. Using the Cannabix equipment the results of a breath sample can be processed within a fraction of the time without any sample preparation, preconcentration, or derivatisation steps resulting in an efficient and simple workflow.

(1) <https://www.forbes.com/sites/alonzomartinez/2023/11/09/california-and-washington-employers-must-adjust-marijuana-testing-procedures-by-january-1-2024/?sh=62eddba29575>

About Cannabix Technologies Inc.

Cannabix Technologies Inc. is a developer of marijuana and alcohol breathalyzer technologies for law enforcement, workplaces and laboratories. Cannabix is working to develop delta-9 THC and alcohol screening devices. Delta-9 THC is the psychoactive component of marijuana that causes impairment. Breath testing for delta-9 THC would allow employers and law enforcement to identify recent marijuana use that better aligns with impairment. Cannabix is the developer of *contactless breath alcohol detection devices* for employers and other settings.

We seek Safe Harbor.

*On behalf of the Board of Directors*

“Rav Mlait”

CEO  
Cannabix Technologies Inc.

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*The CSE has not reviewed and does not accept responsibility for the adequacy or accuracy of this release.*

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This press release contains forward-looking information that involves various risks and uncertainties regarding future events. Such forward-looking information can include without limitation statements based on current expectations involving a number of risks and uncertainties and are not guarantees of future performance of the Company, such as final development of a commercial or prototype product(s), successful trial or pilot of company technologies, no assurance that commercial sales of any kind actually materialize; no assurance the Company will have sufficient funds to complete product development. There are numerous risks and uncertainties that could cause actual results and the Company's plans and objectives to differ materially from those expressed in the forward-looking information, including: (i) adverse market conditions; (ii) risks regarding protection of proprietary technology; (iii) the ability of the Company to complete financings; (iv) the ability of the Company to develop and market its future product; and (v) risks regarding government regulation, managing and maintaining growth, the effect of adverse publicity, litigation, competition and other factors which may be identified from time to time in the Company's public announcements and filings. There is no assurance that its development of breathalyzer technologies will provide any benefit to the Company, and no assurance that any proposed new products will be built, will be successful in beta testing or clinical trials. There is no assurance that the Company will enter into any partnerships to advance any of its corporate initiatives or technologies. There is no assurance that any “patent pending” or “provisional patents” technologies licensed by the Company or owned by the Company will receive patent status by regulatory authorities. The Company is not currently selling commercial breathalyzers. Actual results and future events could differ materially from those anticipated in such information. These and all subsequent written and oral forward-looking information are based on estimates and opinions of management on the dates they are made and are expressly qualified in their entirety by this notice. Except as required by law, the Company does not intend to update these forward-looking statements.