



News Release

NR 2018 – 13

October 16, 2018

---

## **MINERAL MOUNTAIN UPDATE**

### **Phase 2 To Start 4,000 Meters of Directional Drilling and Down Hole BHEM Designed To Target Deep High Grade Gold Mineralization At Standby Mine On Homestake Mine Gold Trend**

**(Vancouver, October 16, 2018):** Mineral Mountain Resources Ltd. (MMV-TSX.V) and its subsidiary Mineral Mountain Resources (SD) Inc. (“OTCQX: MNRLF”) are pleased to provide the following update.

#### **Regional Black Hills Exploration**

The Keystone and Rochford Gold Districts, Black Hills, South Dakota were heavily prospected for gold in the late 19th and early 20th centuries, with more recent drilling conducted by various companies between 1967-96, but very little work was performed after 1997. Despite similarities to the +40M oz. Homestake Gold Mine, located 70 and 25 kilometers to the north of each district, in terms of the iron formation host rock composition, lithologic succession, structural style, metamorphic grade, and gold-related alteration and mineralization, both the Keystone and Rochford Gold Districts have remained comparatively largely under-explored by drilling, especially below 200 meters of depth.

With the completion of Phase 1 at Standby in September 2018, Mineral Mountain has expended over \$10 million US, since 2012, exploring for the next Homestake-type Gold Ore Ledge.

Beginning in 2013, Mineral Mountain Resources (MMV) began consolidating the Homestake gold belt through claim staking, optioning to purchase some strategic claim parcels, and optioning patented private land (including the Standby Mine Properties). Comprehensive compilation in GIS and 3D (Leapfrog) of acquired historic drilling data, rock and surficial geochemical sample data, and geologic mapping, as well as geophysical data from a District-wide, closely-spaced HELITEM-Mag survey flown for MMV, this has enabled construction of a district-wide digital database to guide exploration. MMV’s initial compilation and targeting defined three, multi-kilometer, long gold-anomalous trends characterized by structurally

thickened iron formation, late shear structures and alteration (comprising quartz-veining and quartz-flooding with hydrothermal chlorite as vein selvages and replacement, abundant arsenopyrite, introduced and remobilized pyrrhotite, and up to multiple grams per tonne anomalous gold intervals).

### **The Standby Target**

**The Standby Target**, comprising the Millsite Syncline and the subsidiary Standby Syncline along the northern portion of the Standby-Bloody Gulch-Lookout Trend, **is of sufficient scale (multi-kilometer plunge length of structurally thickened iron formation) to host a major gold ore-bearing structure on the scale of the Homestake 9-Ledge.** In February 2018, MMV began to explore the Standby Target (Phase 1) along only the initial 400 m of plunge with a 2,937 meter diamond drilling program, supported by borehole EM (BHEM) combined with surface TEM traverses to help define stratigraphic conductors comprising pyritic-pyrrhotitic-carbonaceous phyllites bounding the target iron formation, with very strong more localized conductors associated with remobilized pyrrhotite and enhanced graphite where these sulfidic-carbonaceous units are cut by late shear zones. There are localized BHEM conductive responses directly associated with highly sulfidic gold mineralization confirming this technology will be valuable on our deeper phase 2 drill program.

MMV's drilling to date has defined a gold-bearing, quartz-flooded, hydrothermal chlorite-altered, arsenopyrite-pyrrhotite mineralized near-vertical shear zone in iron formation, approximately 30 m wide, striking 129 degrees Azimuth, in structurally thickened grunerite-siderite-chlorite-chert iron formation which comprises a tight isoclinal, steeply dipping closed anticlinal structure forming the eastern limb of the Standby Syncline and western limb of the Millsite Syncline. This regional-scale structure has been traced in the Company's Phase I drill program for over 400 meters, and, according to MMV's database, it also continues for up to 1.5 kilometers down-plunge where Homestake Mining, between 1986-87 intersected high grade gold grading **10.29 g/t Au over 3.1 meters**. In MMV's Phase 1 drill program, drill hole **ST18-006** intersected **2.12 g/t Au over 20 meters**, including 4.39 g/t Au over 2.5 m and 5.24 g/t Au over 1.5 m, 230m below surface. This drill hole is 50m down plunge of historical drill hole **BLG-UG3** which graded **3.36 g/t Au over 24 meters**. The ST18-006 intersection occurs within a 34m wide classic Homestake-style quartz vein-hydrothermal chlorite breccia with quartz flooding, 3-15% coarse-grained arsenopyrite and 3-7% pyrrhotite. This gold zone is considered to be "Upper Tail" mineralization.

While the recently completed drilling results to date, from the Phase 1 program, are respectable, compared to the first-phase results (at the Homestake Mine), when it's geological team were exploring the **15-Ledge**, or similarly with the first-phase exploration results from the **North Homestake (Sheeptail Gulch) target** to the northwest of the Homestake Mine. In the 15 Ledge Homestake Mine exploration program example, a systematic 36-hole drill program, in the late 1980's, tested the 15 Ledge underground target at Homestake, which at that time was not known

to host a known gold ore ledge, from underground drill setups spaced initially several 100s of meters apart. The best results from this first phase was only **4.6 g/t Au over 1 meter**, but many lower-level Au concentrations (0.10 g/t Au to 0.90 g/t Au), increased arsenopyrite and late-stage quartz veins with chlorite selvages were used to define vectors toward Au mineralization. Following the vectors, Homestake's second phase of drilling on closer-spaced 50m to 100m step-outs from the modest mineralization encountered in the first phase, resulted in the intersection of **25 g/t Au over 10m**, considered the discovery hole for the approximately 1 million Au ounces 15-Ledge. In another comparison to the Standby Target, at Homestake, the surface expression of the **9.5 MOz ounce 9 Ledge** has an upper tail that is expressed in a 30m x 15m area in a road cut, within which the majority of rock samples assay only 100's ppb Au to 1 g/t Au, with one higher-grade sample assaying 4.5 g/t Au. Alteration, characterized by quartz veins with moderately to well-developed hydrothermal chlorite selvages and minor sulfide minerals, is locally well developed at the 9 Ledge upper tail position. **Consistent ore grade mineralization (~8 g/t Au over 5-10m widths) in the 9 Ledge does not begin to develop until 1200m down plunge (800m vertical depth) on the 9 Ledge.**

MMV's drilling to date has demonstrated that there is a strong and persistent structural zone cutting significant thicknesses of prospective altered iron formation, and that within this zone there are nodes of relatively strong gold mineralization. Persistence is required to trace the system down-plunge to a **Centroid-type** gold ore ledge position. Additionally, there are a significant number of similar additional targets on the Standby-Bloody Gulch-Lookout Trend and other trends in the Rochford District on MMV claims, most of which have **not** been tested at depth, or have never even been drilled in some cases.

### **Directional Drilling**

Using a steerable wireline core barrel, this method significantly reduces the cost by hitting targets quicker and more accurately than the traditional method used in Phase 1 of the Company's drilling program. By making multiple branches of up to 30 holes from a pilot hole that is approximately 800 meters deep, this method dramatically reduces both the time spent and cost. A major benefit to directional drilling is that this method is amenable to multiple highly accurate cross cuts off the pilot hole to penetrate the main mineralized shear zone down plunge. This pilot hole will greatly improve the geological data that will be collecting as we probe this hole with "state of the art" BHEM technology. This technology has the capability to see up to 400 m off hole as we side track the mineralized structure down plunge towards the high grade gold zone. This BHEM can also see localized conductive responses directly associated with highly sulfidic gold mineralization.

### **Final Phase 1 Results**

The Company has received the final results for the last hole in the Phase 1 program, ST18-009, which tracked stratigraphically above the gold bearing iron formation intersecting intensely

folded phyllite in the Poverty Gulch Formation heavily mineralized with replacement pyrrhotite up to 25%! Anomalous gold was recorded over wide intervals.

### **About Mineral Mountain Resources and the Rochford Gold Project**

Mineral Mountain Resources Ltd., through its wholly owned subsidiary Mineral Mountain Resources (SD) Inc., is focused on the exploration of its 100%-owned **Rochford Gold Project** situated along the highly prospective **Homestake Gold Belt** in the Black Hills of South Dakota, U.S.A. The Rochford Project covers approximately 7,500 acres and straddles three major trends of structurally thickened auriferous iron formation that host ledge-type gold mineralization.

Since 2012, the Company, through its wholly owned subsidiary Mineral Mountain Resource (SD) Inc., has spent over \$10 million US in gold exploration in the Black Hills of South Dakota and controls the largest land position in the Rochford greenstone belt and now possesses by far the largest and most comprehensive database for the district in modern day exploration history! The Rochford Project is vastly under-explored and MMV's Phase 1 drill results reinforces the districts potential to host district scale gold discoveries.

On Behalf of the Board of Directors  
**MINERAL MOUNTAIN RESOURCES LTD.**

*"Nelson W. Baker"*, President and CEO

For further information, please contact:

Brad Baker, Vice-President Corporate Development & Director

(604) 714-0111 [info@mineralmtn.com](mailto:info@mineralmtn.com)

Or visit our website: [www.mineralmtn.com](http://www.mineralmtn.com)

Forward looking information

This release contains "forward-looking information" within the meaning of applicable Canadian securities legislation ("Forward-looking information"). Forward-looking information includes, but is not limited to, statements that address activities, events or developments that the Company expects or anticipates will or may occur in the future, including such things as future business strategy, competitive strengths, goals, expansion, growth of the Company's businesses, operations, plans and with respect to exploration results, the timing and success of exploration activities generally, permitting time lines, government regulation of exploration and mining operations, environmental risks, title disputes or claims, limitations on insurance coverage, timing and possible outcome of any pending litigation and timing and results of future resource estimates or future economic studies.

Often, but not always, forward-looking information can be identified by the use of words such as "plans", "planning", "planned", "expects" or "looking forward", "does not expect", "continues", "scheduled", "estimates", "forecasts", "intends", "potential", "anticipates", "does not anticipate" or "belief" or describes a "goal" or variation of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will" be taken, occur or be achieved.

Forward-looking information is based on a number of material factors and assumptions, including, the result of drilling and exploration activities, that contracted parties provide goods and/or services on the agreed timeframes, that equipment necessary for exploration is available as scheduled and does not incur unforeseen break downs, that no labour shortages or delays are incurred, that plant and equipment function as specified, that no unusual geological or technical problems occur, and that laboratory and other related services are available and perform as contracted. Forward-looking information involves known and unknown risks, future events, conditions, uncertainties and other factors which may cause the actual results, performance or achievements to be materially different from any future results, prediction, projection, forecast, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, the interpretation and actual results of current exploration activities; changes in project parameters as plans continue to be refined; future prices of gold; possible variations in grade or recovery rates; failure of equipment or processes to operate as anticipated; the failure of contracted parties to perform; labour disputes and other risks of the mining industry; delays in obtaining governmental approvals or financing or in the completion of exploration, as well as those factors disclosed in the company's publicly filed documents. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking information, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking information 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 information.