ASX and Media Release

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Tenement Expansion Over New VMS Prospects with Evidence of High Grade Massive Sulphide Mineralisation at Red Mountain, Alaska

ASX Code: WRM

HIGHLIGHTS

- White Rock has secured additional tenements over historic VMS prospects and an emerging trend of new VMS targets at its 100% owned Red Mountain Project, Alaska.
 - Surface reconnaissance has identified multiple prospect areas, some with high grade massive sulphide rock float that is dominantly sphalerite (zinc sulphide), galena (lead sulphide), chalcopyrite (copper sulphide) and pyrite (iron sulphide).



Photos 1 and 2:- Samples of massive sulphide float from the emerging Keevy VMS Trend. Field work is progressing with detailed mapping, surface geochemical sampling and ground geophysics underway to assist in targeting drill holes that will test a number of these new prospects in the coming weeks.

White Rock Minerals ("White Rock" or "the Company") is pleased to announce the expansion of its district-scale tenement package at its 100% owned Red Mountain Project (Figure 1). The Company has moved to secure additional contiguous tenements to the north that cover the Galleon Prospect that was previously held by competitors and additional contiguous tenements to the south that cover the newly identified Keevy VMS Trend. An additional 58 mining claims covering 38km² (15 square miles) have been staked. White Rock's Red Mountain project now comprises 1,327 mining claims over 836km² (323 square miles).

Initial field work focused on follow-up of areas with anomalous stream geochemistry and reconnaissance mapping of conductivity targets identified from the airborne SkyTEM survey acquired in 2019. Prior to the commencement of the 2021 field season White Rock completed a detailed systematic assessment of this SkyTEM survey to identify subtle conductivity anomalies with similar characteristics to the known VMS mineralisation at Dry Creek and WTF. Dry Creek and WTF already deliver an Inferred Mineral Resource¹ of 9.1 million tonnes @ 157g/t silver, 5.8% zinc, 2.6% lead and 0.9g/t gold for a grade of <u>609g/t AgEq²</u>, alternatively for a grade of <u>13.2% ZnEq³</u>.

A total of 90 VMS targets east of the Wood River were identified (Figure 2).

Issued Securities Shares: 89.5 million **Options: 3.0 million**

Cash on hand (31 Mar 2021) \$10.9M

Market Cap (19 July 2021) \$43.4M at \$0.485 per share

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Prospect reconnaissance teams are now focused on the newly defined Keevy VMS Trend where a number of VMS "time horizon" indicators have been identified at multiple prospects. Key indicators of VMS potential at each prospect are summarised as follows:

- Yeti black barite with elevated silver and strong base metal soil anomalism;
- Kiwi massive sulphide float and elevated base metal soil anomalism;
- Yogi minor chert and strong base metal soil anomalism;
- Jack Frost massive sulphide float and strong base metal soil anomalism;
- Easy Ivan strong base metal soil anomalism; and
- Lowrider strong base metal soil anomalism.

Field activities have now moved to more detailed geologic mapping, systematic surface geochemical sampling and ground electrical geophysics surveys to assist in identifying and prioritising targets for drill testing. The first drill sites at Easy Ivan and Jack Frost are currently being prepared.

White Rock is exploring the Red Mountain Project area for additional VMS deposits that will complement the two existing silver-rich high-grade zinc deposits at Dry Creek and WTF with an Inferred Mineral Resource¹ of **9.1 million** tonnes @ 157g/t silver, 5.8% zinc, 2.6% lead and 0.9g/t gold for a grade of <u>609g/t AgEq</u>², alternatively for a grade of <u>13.2% ZnEq³</u>.



Figure 1: White Rock's expanded strategic tenement package (previous existing claim outline in black and newly staked claim outline in blue) with the location of known VMS prospects over the regional geology map (after Dusel-Bacon et al., 2012).



Figure 2: Red Mountain Project showing the 90 airborne EM conductivity targets (brown polygons), pXRF soil samples >1,000ppm lead (pink squares) and the newly identified Keevy VMS Trend, with new prospect areas (red stars) that are the current focus of on ground field activities and upcoming drilling. Elevated lead in soils is used to distinguish potential VMS horizons from widespread elevated zinc associated with carbonaceous shale host rocks.

¹ Refer ASX Announcement 26th April 2017 "Maiden JORC Mineral Resource, Red Mountain".

² Silver equivalent grades are estimated using S&P Global forecast for the 200 to 2030 period as at 2 November 2020 adjusted for recoveries derived from historical metallurgical testing work and calculated with the formula: $AgEq =100 \times [(Zn\% \times 2,425 \times 0.9) + (Pb\% \times 2,072 \times 0.75) + (Cu\% \times 6,614 \times 0.70) + (Ag g/t \times (21.00/31.1035) \times 0.70) + (Au g/t \times (1,732/31.1035) \times 0.80)] / (21.00/31.1035 \times 0.70)$. White Rock is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold. WRM has chosen to report AgEq grades in addition to ZnEq grades as although individually zinc is the dominant metal by value, the precious metals (Ag+Au) are of similar contribution by value (44% for zinc and 40% for silver+gold respectively) and will be recovered and sold separately to the zinc.

³ Zinc equivalent grades are estimated using S&P Global forecasts for the 2020 to 2030 period as at 2 November 2020 adjusted for recoveries derived from historical metallurgical testing work and calculated with the formula: $ZnEq = [(Zn\% \times 2,425 \times 0.9) + (Pb\% \times 2,072 \times 0.75) + (Cu\% \times 6,614 \times 0.70) + (Ag g/t \times (21.00/31.1035) \times 0.70) + (Au g/t \times (1,732/31.1035) \times 0.80)] / (2,425 \times 0.9)$. White Rock is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold.

REFERENCES

Dusel-Bacon, C., Foley, N., Slack, J.,Koenig, A., Oscarson, R., 2012. Peralkaline- and Calc-Alkaline-Hosted Volcanogenic Massive Sulfide Deposits of the Bonnifield District, East-Central Alaska, Economic Geology, v.107, pp. 1403-1432.

This release is authorised by the Board of White Rock Minerals Ltd.

Competent Persons Statement

The information in this report that relates to exploration results is based on information compiled by Mr Rohan Worland who is a Member of the Australian Institute of Geoscientists and is a consultant to White Rock Minerals Ltd. Mr Worland has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Worland consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

This announcement may contain certain 'forward-looking statements'. Any forecasts or other forward-looking statements contained in this announcement are subject to known and unknown risks and uncertainties and may involve significant elements of subjective judgment and assumptions as to future events which may or may not be correct. There are usually differences between forecast and actual results because events and actual circumstances frequently do not occur as forecast and these differences may be material. White Rock does not give any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements in this announcement will actually occur and you are cautioned not to place undue reliance on forward-looking statements.

No New Information or Data

This announcement contains references to exploration results and Mineral Resource estimates, all of which have been cross-referenced to previous market announcements by the Company. The Company confirms that it is not aware of any new information or data that materially affects the information included in the relevant market announcements and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

For more information about White Rock and its Projects, please visit www.whiterockminerals.com.au

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APPENDIX 1: JORC CODE, 2012 EDITION - TABLE 1

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Soil samples are taken from within 200mm below surface. Soil samples are also analysed using a handheld Olympus Vanta XRF analyser, calibrated in "Soil" mode. Rock chip samples are grab samples. Rock chip samples are submitted to ALS (Fairbanks) or Bureau Veritas (Fairbanks) for preparation and analysis.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). 	Not applicable as no new drill results are being reported.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	 Not applicable as no new drill results are being reported.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	Not applicable as no new drill results are being reported.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all subsampling stages to maximise representativity of samples. Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material big sampled. 	 Soil samples do not undergo any sample preparation prior to analysis by handheld XRF. Rock chip samples are submitted to ALS (Fairbanks) or Bureau Veritas (Fairbanks) and undergo standard industry procedure sample preparation (crush, pulverise and split) appropriate to the sample type and mineralisation style. Full QAQC system is in place for soil and rock chip assays to determine accuracy and precision of assays Field duplicate samples are collected for rock chip samples. No field duplicate samples are collected for rock chip samples. Sample sizes are appropriate to the grain size of the material being sampled.

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Soil samples are analysed with a handheld Olympus Vanta XRF analyser on "Soil" mode, using three beams, each with 10 second duration to give a total analysing time of 30 seconds. Results are considered to be near- total. The handheld XRF is calibrated in "Soil" mode. Field duplicate samples are analysed with the handheld pXRF. No other quality control samples are inserted in the soil samples analysed by handheld XRF. Acceptable levels of accuracy have been established through validation of handheld XRF analyses with laboratory assays of historical soils. Rock chip samples are submitted to ALS (Fairbanks) or Bureau Veritas (Fairbanks) for analysis. At ALS Au is assayed by technique Au-AA25 (30g by fire assay and AAS finish). Multi-element suite of 48 elements is assayed by technique ME-MS61 (1g charge by four acid digest and ICP-MS finish). Over limit samples for Ag, Cu, Pb and Zn are assayed by technique OG62 (0.5g charge by four acid digest and ICP-AES or AAS finish) to provide accurate and precise results for the target element. At Bureau Veritas Au is assayed by technique FA430 (30g by fire assay and AAS finish). Multi-element suite of 45 elements is assayed by technique MA200 (0.25g charge by four acid digest and ICP-MS finish). Over limit samples for Ag, Cu, Pb and Zn are assayed by technique MA404 (four acid digest and AAS finish) to provide accurate and precise results for the target element. Fire assay for Au is considered total. Multi-element assay four acid digest are considered near-total for all but the most resistive minerals (not of relevance). The nature and quality of the analytical technique is deerned appropriate for the mineralisation style. Full QAQC system is in place for soils and rock chip sample assays by ALS and Bureau Veritas including blanks and standards (relevant certified reference material). Acceptable levels of accuracy and precision have been established.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Sample information is documented in digital field notebooks and subsequently merged into the digital database. Handheld XRF results for soil samples are downloaded directly from the handheld XRF and merged into the database. Assay results from ALS and Bureau Veritas for rock chip samples are downloaded directly from ALS or Bureau Veritas and merged into the database. Digital data is filed and stored with routine local and remote backups. No adjustment to assay data is undertaken.
Location of data points	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	 Sample locations are collected using a handheld GPS (accuracy +/- 5m). All sample locations are recorded in Longitude/Latitude (WGS84 for Alaska Zone 6 datum).
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Data spacing is variable and appropriate to the purpose of sample survey type. Sample compositing is not applicable in reporting exploration results.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 No significant orientation based sampling bias is known at this time.

Criteria	JORC Code explanation	Commentary
Sample security	The measures taken to ensure sample security.	 Soil samples are collected in plastic bags in the field and analysed at camp using the handheld XRF. Soil and rock chips samples delivered to ALS or Bureau Veritas from the field camp are secured in bags with a security seal that is verified on receipt by ALS or Bureau Veritas using a chain of custody form.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been completed to date.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 1,327 mining and leasehold locations in the State of Alaska ('the Tenements'). The Tenements are owned by White Rock (RM) Inc., a 100% owned subsidiary of Atlas Resources Pty Ltd, which in turn is a 100% owned subsidiary of White Rock Minerals Ltd. A portion of the Tenements are subject to an agreement with Metallogeny Inc, that requires a further cash payment of US\$450,000 due December 31, 2021. The agreement also includes a net smelter return royalty payment to Metallogeny Inc. of 2% NSR with the option to reduce this to 1% NSR for US\$1,000,000. All of the Tenements are current and in good standing.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 The Red Mountain project has seen significant exploration conducted by Resource Associates of Alaska Inc. ("RAA"), Getty Mining Company ("Getty"), Phelps Dodge Corporation ("Phelps Dodge"), Houston Oil and Minerals Exploration Company ("HOMEX"), Grayd Resource Corporation ("Grayd") and Atna Resources Ltd ("Atna"). All historical work has been reviewed, appraised and integrated into a database. A selection of historic core has been resampled for QAQC purposes. Data is of sufficient quality, relevance and applicability.
Geology	 Deposit type, geological setting and style of mineralisation. 	 Volcanogenic massive sulphide ("VMS") mineralisation located in the Bonnifield District, located in the western extension of the Yukon Tanana terrane. Intrusion related gold system ("IRGS") mineralisation located in the Bonnifield District, located in the Tintina Gold Province. The regional geology consists of an east-west trending schist belt of Precambrian and Palaeozoic metasedimentary and volcanic rocks. The schist is intruded by Cretaceous granitic rocks along with Tertiary dikes and plugs of intermediate to mafic composition. Tertiary and Quaternary sedimentary rocks with coal bearing horizons cover portions of the older rocks. The VMS mineralisation is most commonly located in the upper portions of the Totatlanika Schist and the Wood River assemblage, which are of Carboniferous to Devonian age. IRGS mineralisation is locally associated with Cretaceous granitic rocks typical of major deposits within the Tintina Gold Province.
Drill hole Information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case 	Not applicable as no new drill results are being reported.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	 No aggregation methods were used in the reporting of results.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	 Not applicable as the results being reported do not relate to widths or intercept lengths of mineralisation.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	 Appropriate maps are included in the body of the report.
Balanced reporting	 Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 Maps showing individual sample locations are included in the report. All results considered significant are reported.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 Other relevant and material information has been reported in this and earlier reports.
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Field crews are actively completing reconnaissance mapping, surface geochemical sampling (rock chip, soil and stream sediment sampling) and ground geophysics surveys. Drill testing of a number of new targets is underway.