# ASX and Media Release

Tuesday, 27th July 2021

# Exploration Update - Red Mountain, Alaska

**ASX Code: WRM**
**OTCQX: WRMCF**

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

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

**Market Cap** (26 July 2021)
$44.3M at $0.495 per share

**Directors & Management**
Peter Lester
Non-Executive Chairman

Matthew Gill
Managing Director &
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Non-Executive Director

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The 100% owned **Red Mountain Project** is located in central Alaska. The Company is exploring for Intrusion Related Gold System (**IRGS**) mineralisation and high-grade silver-zinc-gold-lead volcanogenic massive sulphide (**VMS**) deposits.

The 2021 field season is now at its halfway point. White Rock has been operating three diamond drill rigs, two remote camps established with over 40 personnel and supported by two helicopters.

Field activities to date include:

- Drilling for down-dip extensions to the Dry Creek VMS deposit.
- Drill testing of new VMS targets in the Red Mountain area and along the newly identified Keevy VMS Trend.
  - The highly prospective nature of this Keevy VMS trend saw the Company peg an extra 38km$^2$ at the beginning of the 2021 season to secure this area for follow-up exploration.
- Drill testing of the Last Chance Gold Target.
- To date, some 2,769 metres have been drilled from 9 holes across 6 prospects.
  - The Company's drill program has been affected to some degree by a lack of access to drillers during the height of the field season in North America. The Company is currently assessing how to allocate drilling resources to ensure a combination of maximum productivity together with drilling the highest priority targets to deliver discoveries during the remainder of the 2021 field season.
- Surface reconnaissance of numerous VMS targets in both the Red Mountain and Last Chance areas has been a key focus with detailed soil sampling, ground magnetics and CSAMT geophysics completed and/or underway at:
  - Jack Frost and Easy Ivan, both are new prospects identified during the 2021 field season that are now drill ready in less than 7 weeks of field work.
  - Yogi, Kiwi and Yeti, all on the newly identified Keevy VMS trend,
  - Horseshoe, Ringer, Bullseye, Bib, Bib West, Copper Creek and Peaches.
- Surface reconnaissance of new gold stream anomalies identified during 2020 has also been occurring with detailed prospect soil sampling and ground magnetics at the newly identified Pepper prospect, east of the Last Chance Gold Target.
- In total, across both the VMS and gold targets, over 5,000 soil samples and 200 rock chip samples have been taken, plus over 70 line kilometres of ground magnetics and 10 line kilometres of CSAMT surveyed.

**White Rock's Technical Advisor Dr Quinton Hennigh commented**: "Before the Company's 2021 field program commenced, many VMS targets were identified for field examination. Six high-priority VMS targets were quickly identified along the Keevy VMS trend immediately south of Dry Creek. Recent samples collected from these areas include massive sphalerite, galena and chalcopyrite, a very promising indication these targets are potentially high grade. These targets are drill ready, and in addition to the already aggressive exploration plans, White Rock will attempt to test as many of them as possible this season."

**Exploration Update – Overview**

The 100% owned **Red Mountain Project** is located in central Alaska (Figure 13). The Company is exploring for Intrusion Related Gold System (**IRGS**) mineralisation and high-grade silver-zinc-gold-lead volcanogenic massive sulphide (**VMS**) deposits.

IRGS exploration is focused on the large 15km$^2$ Last Chance gold target[1] located within the Tintina Gold Province (Figure 12), host to giant gold deposits including Donlin Creek (45 Moz Au[2]), Fort Knox (13.5 Moz Au[3]) and Pogo (10 Moz Au[4]), which are all Cretaceous IRGS deposits.

VMS exploration is focussed on the East Bonnifield District within the Yukon-Tenana Terrane. There are already two high-grade zinc-silver rich deposits with an Inferred Mineral Resource[5] of **9.1 million tonnes @ 157g/t silver, 5.8% zinc and 0.9g/t gold for a grade of 13.2% ZnEq**[6], alternatively, **for a grade of 609g/t AgEq**[7]. The Company controls a significant land tenement package of 836km$^2$ that covers the district-wide prospective VMS stratigraphy as well as the large Last Chance gold anomaly.

The Company's 2021 field is fully underway and at approximately the half-way point with over 40 full-time personnel on-site in two remote field camps serviced by fixed wing planes with all field activities helicopter supported. The 2021 exploration program is the biggest that the company has undertaken in Alaska with a multifaceted approach that covers new target generation (geological reconnaissance, surface stream geochemistry and airborne geophysics), detailed prospect exploration (geological mapping, surface geochemical sampling and ground geophysics surveys), drill testing new targets, Resource extension drilling and downhole geophysics surveys.

The Project can be split into two adjacent geographic areas (Figure 1); Red Mountain to the east and Last Chance to the west, both supported by separate field camps.

At **Red Mountain** the focus is:

- Drilling for down-dip extensions to the Resource at the Dry Creek VMS deposit.
- Drill testing new VMS targets.
- Reconnaissance through to detailed prospect exploration of conductivity anomalies and surface geochemical anomalies to deliver targets for drill testing.

At **Last Chance** the program is split into exploration for new VMS targets and ongoing exploration of the Last Chance Gold Target and the identification of new gold targets from previous regional stream geochemical surveys.

The **Last Chance VMS** exploration is focused on:

- Follow-up detailed prospect exploration of new prospects identified from reconnaissance activities during the 2020 season.
- Drill testing new VMS targets.
- Further reconnaissance of new targets identified from an airborne EM survey completed earlier during 2021.

The **Last Chance gold** exploration program is focused on:

- Drill testing shallow and deep targets at the Last Chance Gold Target, follow-up to work completed during 2020.
- Reconnaissance of new gold stream anomalies identified from the 2020 field program.
- Follow-up detailed prospect exploration of new prospects identified from reconnaissance.

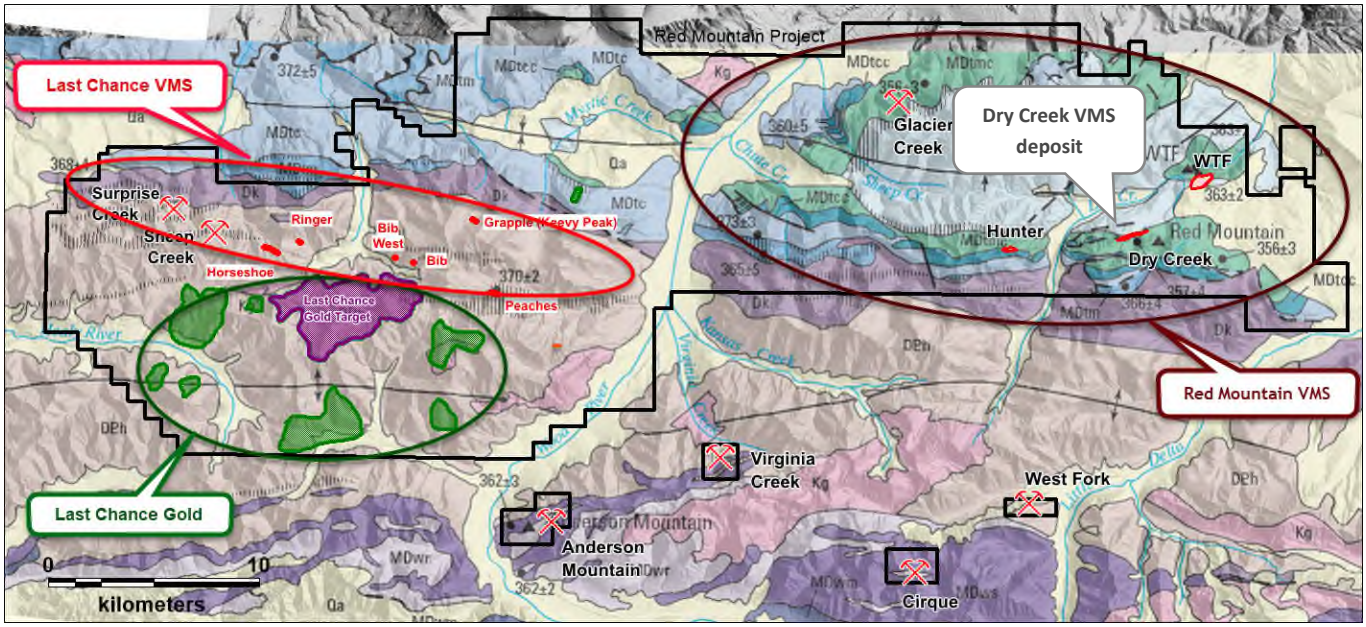


***Figure 1:*** *White Rock's Red Mountain – Last Chance project showing the four areas of focus for drilling: Dry Creek deposit, the Red Mountain VMS "camp", the Last Chance "VMS "camp" and the Last Chance IRGS gold targets.*

**Red Mountain Area – New VMS Targets**

Prior to the commencement of the 2021 field season White Rock completed a reassessment of data to identify new areas to prospect for VMS mineralisation based on airborne EM conductivity anomalies (this data obtained from the Company's 2019 SkyTEM survey), surface geochemical anomalies and the geological setting. A total of 90 conductivity anomalies throughout the prospective Totatlanika Schist Formation and into the footwall Keevy Peak Formation were identified. Previous years exploration had focused on the upper part of the Totatlanika Schist. The 2021 field season shifted focus to include reconnaissance of anomalies deeper in the stratigraphy.

The Company recognised the highly prospective potential of this Keevy Peak Formation and in early 2021 pegged an extra 38km$^2$ to secure this ground (refer ASX Announcement from 20$^{th}$ July 2021). To date field crews have assessed over 25 of these anomalies. A suite of six targets located along the emerging Keevy VMS trend have been prioritised for detailed prospect exploration (Figure 2). Over 2,700 soil samples have been collected and analysed using a portable XRF unit to provide immediate results for surface crews to follow-up with detailed mapping. Reconnaissance mapping has identified a number of VMS time horizon indicators of significance including massive sulphide rocks rich in sphalerite, galena and chalcopyrite, chert, black barite and zones of sericite alteration accompanying base metal soil anomalism. 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;
- **Easy Ivan** - strong base metal soil anomalism (Figure 3). This is currently a focus for follow-up drilling;
- **Jack Frost –** massive sulphide float and strong base metal soil anomalism (Figures 4 and 5). This is currently a focus for follow-up drilling; and
- **Lowrider -** strong base metal soil anomalism.

To date detailed prospect exploration has progressed at Easy Ivan (Figure 3) and Jack Frost (Figures 4 and 5) with targets ready for drilling. In addition to mapping and detailed soil sampling, ground geophysics has included six lines of CSAMT at Easy Ivan with 5 lines of CSAMT currently in progress at Jack Frost. Drilling of each target area will be followed by a combination of downhole EM and fixed loop EM surveys to identify any strong conductors associated with the VMS horizon at depth. Surface crews are continuing with more detailed assessment at Yogi, Kiwi, Yeti and additional targets further to the west along the Keevy VMS Trend (Figure 2).

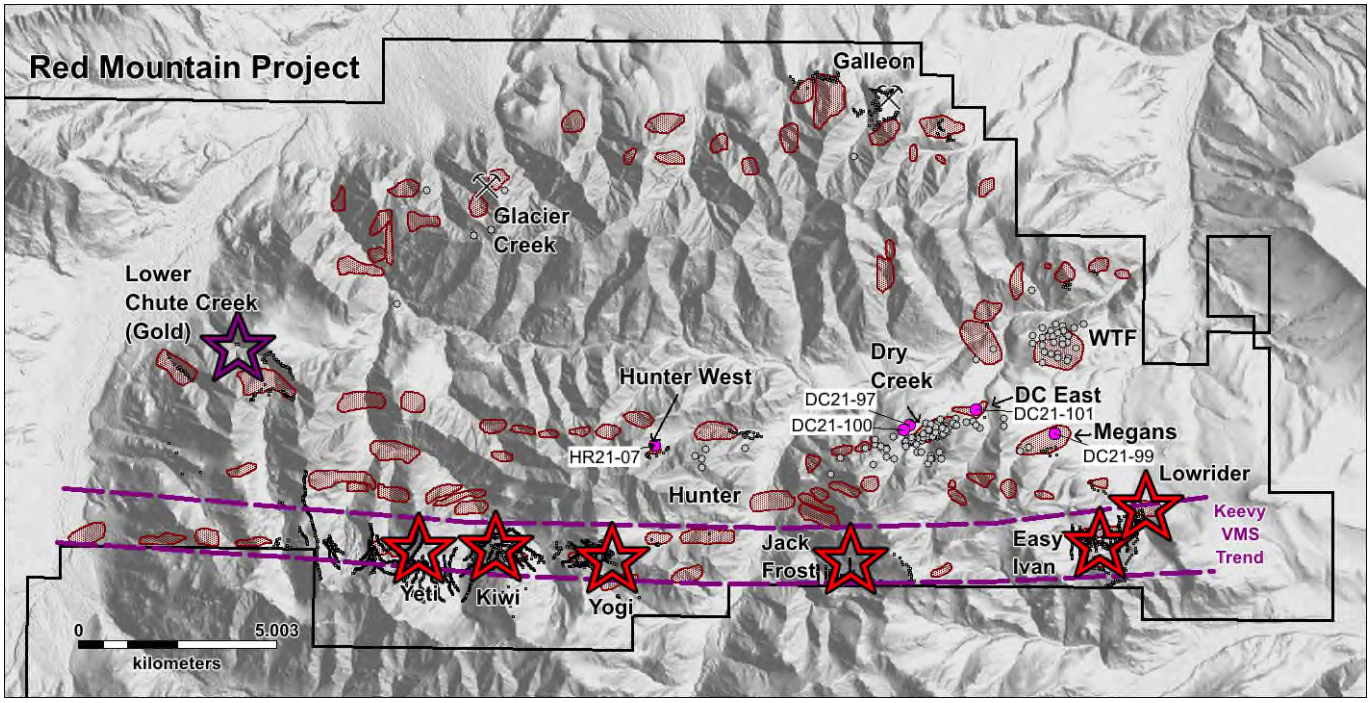


***Figure 2:*** *Red Mountain Project showing the 90 airborne EM conductivity targets (brown polygons), the newly identified Keevy VMS Trend, with new prospect areas (red stars) that are the current focus of on ground field activities (location of soil sample coverage shown as black dots). Location of historic drill collars (grey dots) and 2021 drill collars (pink dots) are also shown.*

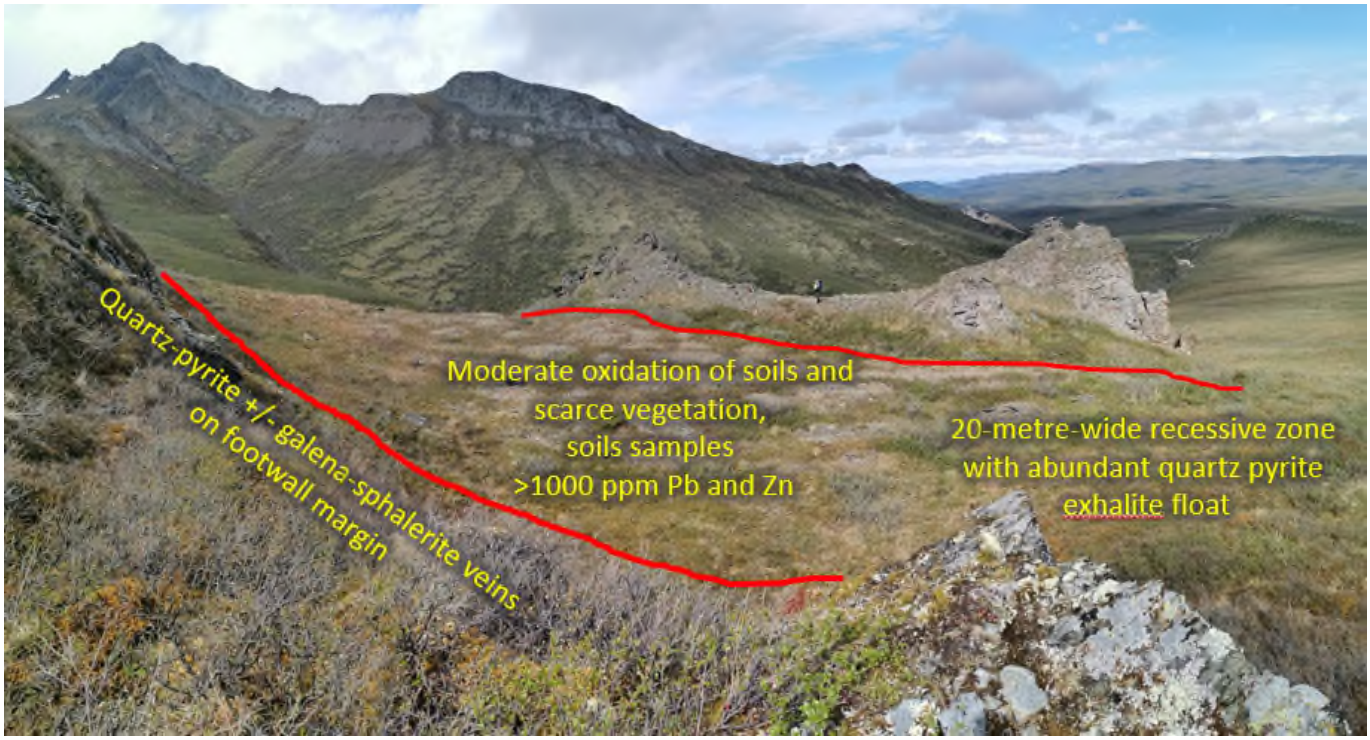


***Figure 3:*** *Photo of the Easy Ivan prospect looking to the northwest.*

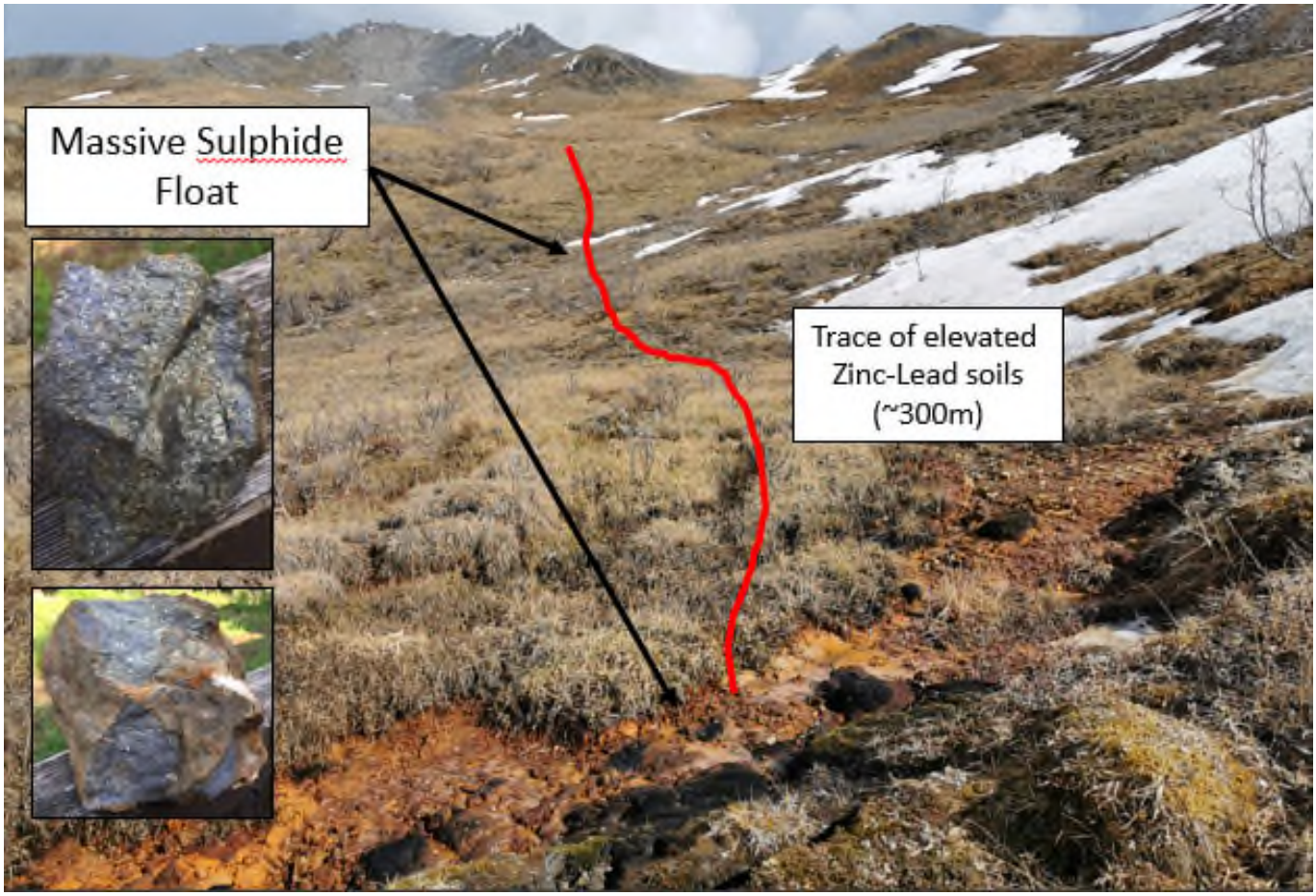


***Figure 4:*** *Photo of the Jack Frost prospect looking to the east along the trend of elevated lead-zinc soils (pXRF) and associated exhalite float, with isolated occurrences of massive sulphide float (inset).*

***Figure 5****: Photo of the Jack Frost prospect looking to the west. This drill was mobilised to this site and commenced drilling on 21st July.*

**Last Chance Area – New VMS Targets**

In the Last Chance area field crews have focused on detailed prospect exploration of the massive sulphide occurrences identified at the end of the 2020 field season. As previously reported (refer ASX Announcement from 1st February 2021) these include:

- ✓ **Horseshoe** (up to **8.3% Zn**, 0.3% Pb, **1.1% Cu**, 12g/t Ag & **3.6g/t Au)**
- ✓ **Bib** (up to **7.3% Zn, 5.1% Pb**, 0.3% Cu, **40g/t Ag** & 0.3g/t Au).
- ✓ **Bib West** (up to **5.7% Zn**, 1.4% Pb & 0.2% Cu)
- ✓ **Grapple** (up to **3.6% Zn, 1.9% Pb, 0.7% Cu & 40g/t Ag**).
- ✓ **Peaches** (up to **2.9% Zn, 2.8% Pb**, 0.2% Cu, 46g/t Ag & **1.5g/t Au**).
- ✓ **Ringer** (up to **1.0% Cu**, 26g/t Ag & 0.4g/t Au).

Reconnaissance during 2021 has identified additional prospect areas with strong base metal anomalism at Copper Creek coincident with a discrete magnetic high extending over 1.5km long, and further reconnaissance continuing to find areas of interest to the west. To date a suite of eight targets (Horseshoe, Ringer, Bullseye, Bib, Bib West, Peaches, Copper Creek, and Grapple; refer Figure 6) have been prioritised for detailed prospect exploration. Over 2,500 soil samples have been collected and analysed using a portable XRF unit to provide immediate results for surface crews to follow-up with detailed mapping.

The VMS occurrences in the Last Chance area are associated with pyrrhotite, a magnetic iron sulphide mineral. Airborne magnetics completed during 2020 showed each of the prospects are coincident with magnetic linear features. Prospect exploration during 2021 has focused on acquiring ground magnetics to provide high resolution data with which to interpret and model targets in conjunction with detailed surface geochemical sampling at Horseshoe, Ringer, Bib West, Bib and Peaches. Surface crews are continuing with more detailed mapping, surface geochemical sampling and ground magnetics at Copper Creek and Grapple.

Earlier during 2021 the Company flew an airborne EM (SkyTEM) survey over the entire last Chance area, primarily to identify any prominent conductivity anomalies associated with the newly identified VMS mineral occurrences. The survey did not identify any high priority targets. Preliminary analysis and interpretation of the airborne EM has identified 14 conductivity anomalies, most of low confidence. Each of those proximal to the new VMS occurrences will be assessed in conjunction with the geological and geochemical data being gathered. Currently the Last Chance VMS systems are more usefully explored using magnetics to assist in developing drill targets given the pyrrhotite present. Consulting geophysicists are currently assisting in the processing, interpretation and modelling of the magnetic data. Preliminary magnetic images for Bib and Bib West are presented in Figure 7.

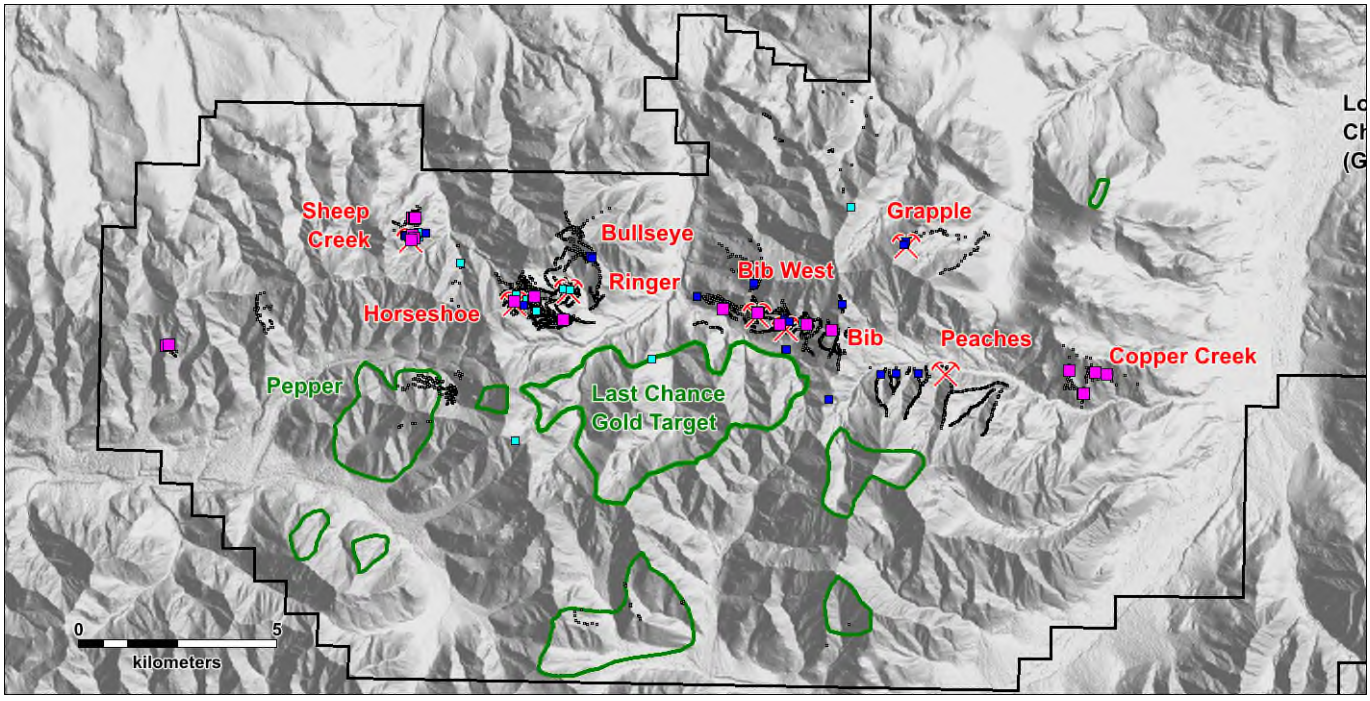


***Figure 6:*** *Last Chance area showing the location of VMS prospects (red labels), gold stream anomalies (green polygons), extent of detailed 2021 soil sampling (black dots) with pXRF soil samples >1,000ppm lead highlighted (pink squares).*

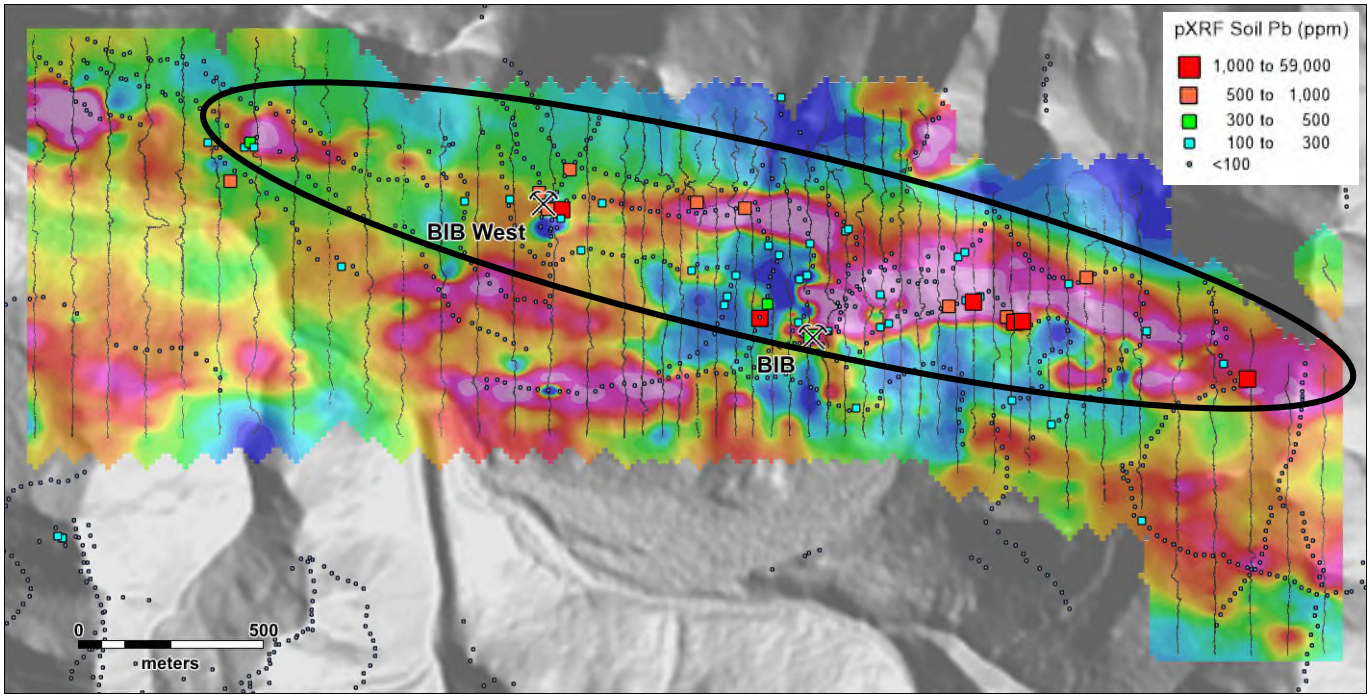


***Figure 7:*** *BIB and BIB West prospect area showing a preliminary image of ground magnetic data and the sporadic anomalous lead soil samples (pXRF) distributed across a 2.5km magnetic trend.*

**Last Chance Area – New Gold Targets**

During 2021 field crews have identified a new gold prospect area at Pepper (Figure 6) where follow-up of a strong gold stream anomaly from 2021 (refer ASX Announcement from 22nd December 2020) has identified hydrothermal silica breccias, alteration and quartz veining in an area with multiple intrusive phases of granite and later intermediate dykes. To date a total of 207 soil samples and 47 rock chips samples have been collected. Assay results are awaited. A ground magnetics survey has also been undertaken to assist in mapping alteration and structure. Consulting geophysicists are currently processing the data.

Field crews will continue to complete reconnaissance across the remaining gold stream anomalies.

**Dry Creek VMS Deposit – Extension Drilling**

White Rock is testing for depth extensions to the Dry Creek VMS deposit on 200m step-outs along its strike extent. A total of between 5 and 7 drill holes are planned (Figure 8) with the first hole (DC21-97) successfully intersecting 1.8m massive sulphide in the Fosters lens, as previously reported (refer ASX Announcement from 30th June 2021). Assay results are awaited with laboratories experiencing unprecedented delays. At present the samples for DC21-97 have been at a Fairbanks laboratory preparation facility for over a month without yet being dispatched for analysis in Reno and Vancouver. White Rock is now utilising a second laboratory in an attempt to deliver timely results, with projected turnaround times of 4-6 weeks. At present results for DC21-97 are not expected for at least another 6 weeks.

The second drill hole (DC21-100) did not intersect any significant massive sulphide mineralisation. DC21-100 intersected a zone of banded sulphides in the host carbonaceous schist interpreted to be west along strike from massive sulphide mineralisation known to exist to the east in the Fosters lens.

Currently the drill rig has commenced drilling DC21-102 targeting both the Fosters and Discovery lenses towards the eastern end of the deposit. DC21-101 will be the deepest test of the Dry Creek deposit to date at over 500 metres beneath the surface. Analysis of drilling data suggests the overall deposit contains pods of mineralisation with a steep easterly plunge component and overall vectoring of a heat source to the east, favouring the potential for improved grade and metal accumulations towards the east

It is anticipated that the first 5 planned drill holes beneath the Dry Creek deposit (Figure 8) will be completed, weather and ground conditions permitting, by early September. Drill productivity to date has been significantly hampered by access to experienced drill crews, with shortages being experienced across North America. This has been further complicated with compromised availability related to a rigorous COVID-19 policy enacted to ensure the health and safety

of the remote camp with over 40 personnel on site in two camps over the course of the field season. To date, some 1,305 metres have been drilled at Dry Creek.

Additional drilling beyond 5 holes at Dry Creek will be determined by results and favourable spring weather conditions during September. Options will be to test open positions along strike to the east and west (Figure 8) or complete a deeper test hole as warranted by results from the next 3 drill holes.

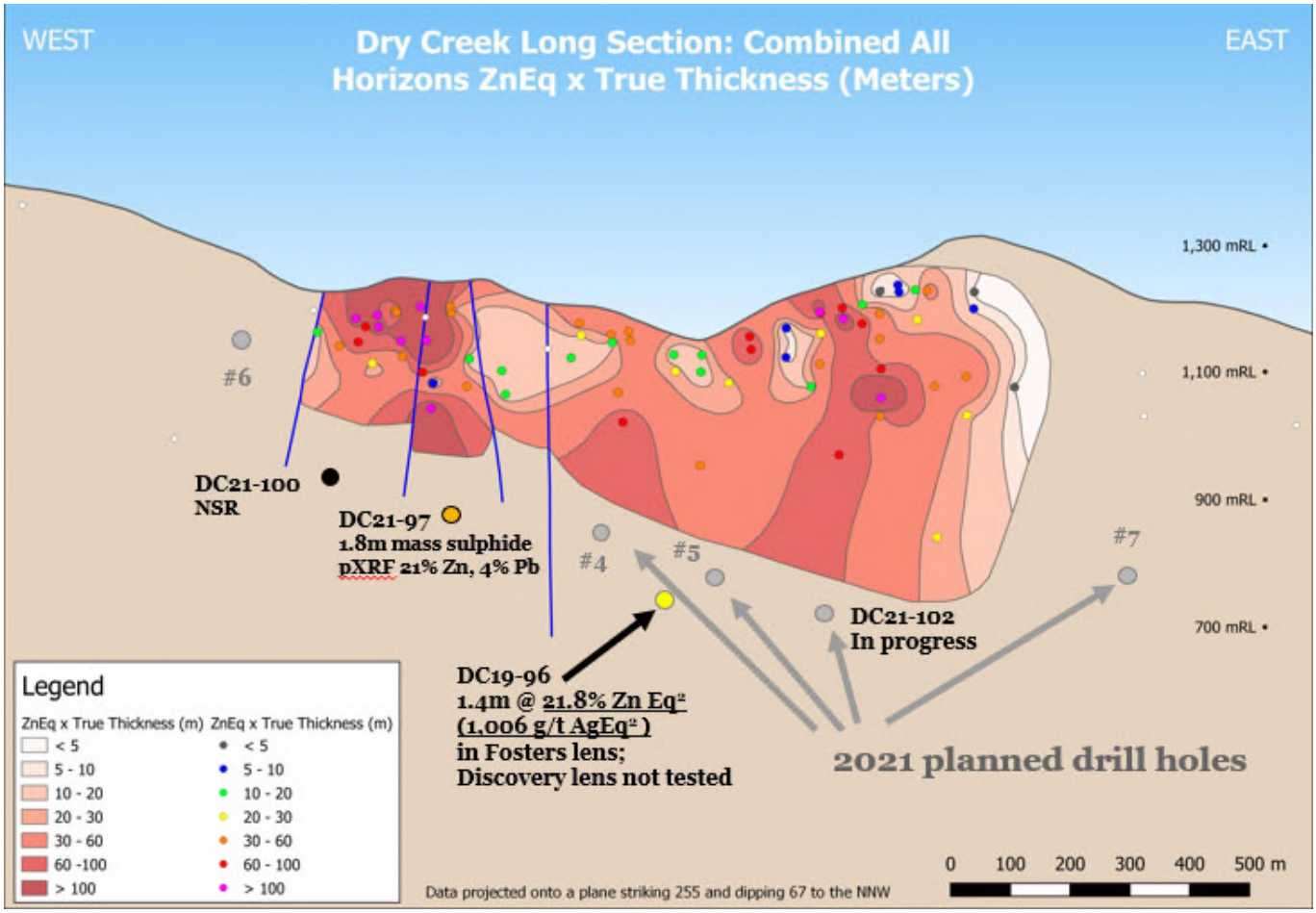


***Figure 8:*** *Long section view towards the north showing the true-width grade thickness of the combined massive sulphide lenses that make up the Dry Creek deposit projected onto an inclined plane, highlighting the growth potential for the deposit at depth and the planned drill hole pierce points at a nominal 200m spacing, including DC21-97 (completed), DC21-100 (completed) and DC21-102 (in progress).*

**New VMS Targets – Drill Testing**

The second drill rig commenced June 2nd and has completed drill holes that test targets at Megan's (DC21-99), as previously reported (refer ASX Announcement from 30th June 2021), and Hunter West (HR21-07). An additional drill hole (DC21-101) targeting DC East was abandoned short of the target and is scheduled to be re-drilled. Drill hole locations are shown on Figure 2.

The Hunter West target is a fault displaced continuation of the massive sulphide horizon originally discovered at Hunter in 2018. The mineralised horizon at Hunter West can be mapped over one kilometre of strike from the fault offset. HR21-07 intersected a narrow, 20cm thick horizon of massive sulphide 200 metres down-dip from surface. The massive sulphide is sphalerite-rich (zinc sulphide) with abundant galena (lead sulphide) and minor chalcopyrite (copper sulphide). Overall mineralisation appears similar to Hunter with no increased thickness encountered to date.

At DC East the target is a discrete conductivity feature along strike of the Dry Creek deposit that can be traced with both CSAMT ground resistivity geophysics (Figure 9) and the airborne SkyTEM survey. Historic drilling at shallow levels intersected the exhalite horizon with the conductor developed at depth to the east. DC21-101 was abandoned at 303 metres down hole, less than 40 metres short of the target. Logging of the drill hole shows similar hangingwall stratigraphy and sulphide alteration to that observed at the Dry Creek deposit. The target is a high priority and is scheduled to be re-drilled.

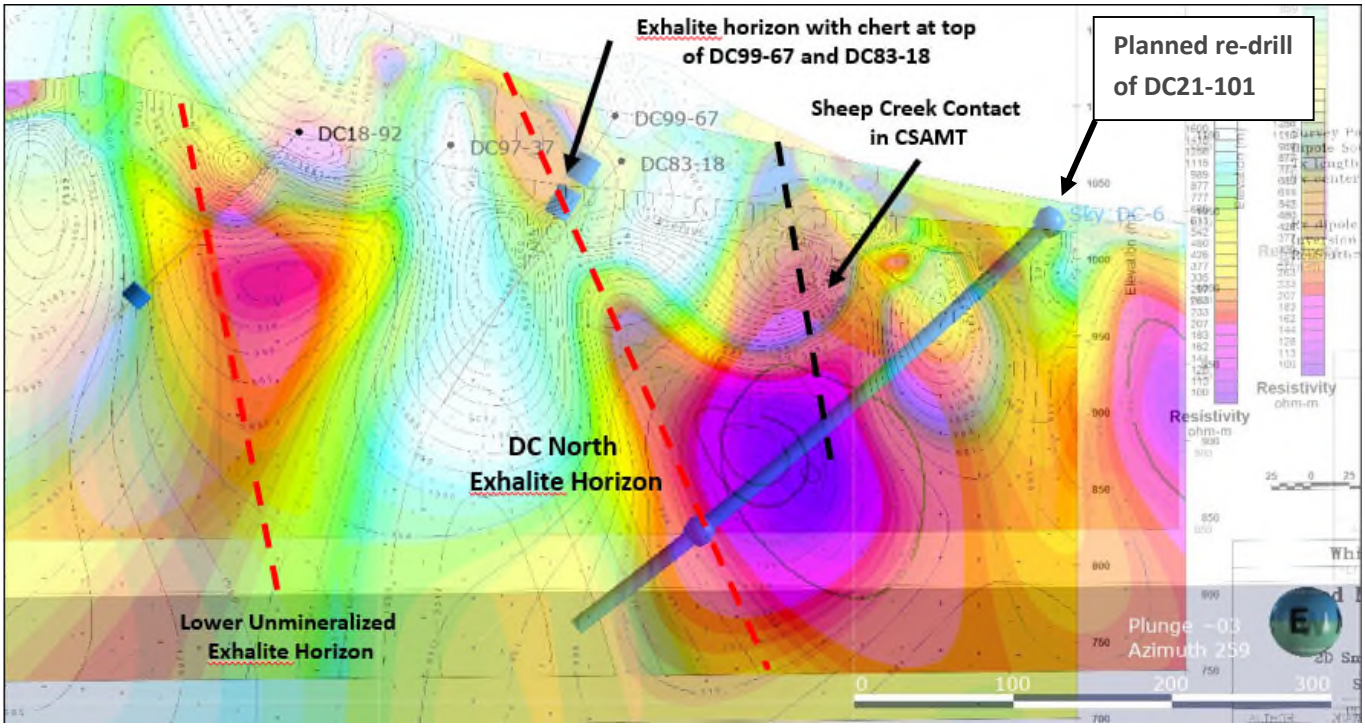


***Figure 9:*** *DC East Target. Cross section view towards the west showing stacked CSAMT profiles that highlight conductivity features associated with exhalite horizons associated with massive sulphide potential and the conductive graphitic schist at the base of the Sheep Creek Member.*

**Last Chance Gold Target – Drill Testing**

The third drill rig commenced June 20th at the Last Chance gold target area where there is a program of 4 holes initially planned to test the Breccia Blowout "BB", Pickle and Sidewinder deep targets, as well as a shallow test of the "418" target (Figure 10). The first drill hole (LC21-09) is testing the BB prospect where there is anomalous gold-silver-arsenic-antimony surface geochemistry associated with a silica hydrothermal breccia located in the immediate footwall to a laterally extensive silicified schist unit (Figure 11). The drill hole is planned to a depth of 525 metres. Drilling has intersected the silicified schist with minor quartz-stibnite veining. The drill hole was abandoned before reaching the footwall position where the silica hydrothermal breccia target is interpreted.

The shortage of experienced drill crew availability across North America has impacted on the productivity of this third drill rig more than the other two rigs. Consequently, testing of the Last Chance gold system at depth has suffered with a period of no drill crew and an extended period operating with a single shift at only 12 hours per day. It is now likely that the third rig will not be able to be supported with a drill crew for the remainder of the season. White Rock is currently assessing how to allocate drilling resources to ensure a combination of maximum productivity together with drilling the highest priority targets to deliver a discovery during the remainder of the 2021 field season.

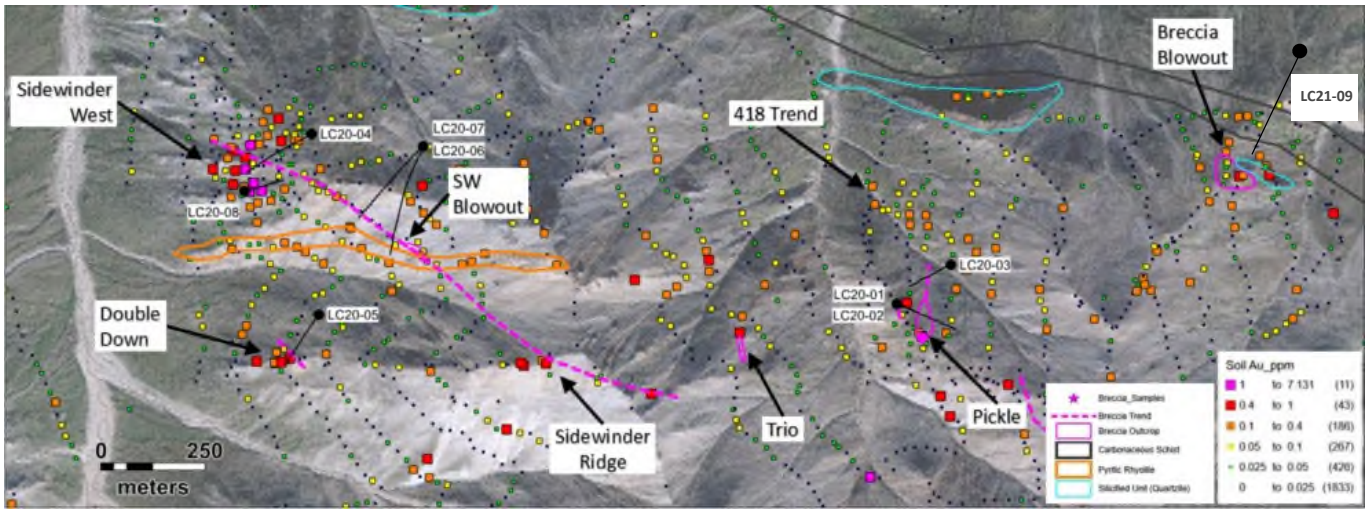


***Figure 10****: Last Chance gold target area showing location of mineralised hydrothermal silica breccias, gold soil assays results, basic geology from reconnaissance mapping, 2019 drill collars and traces in black and the current drill hole LC21-09.*


***Figure 11**: Photo looking west at the BB target showing the hydrothermal silica breccia and silicified schist at surface with a schematic representation of the drill trace for LC21-09 that tested the silicified schist and brecciation at depth.*

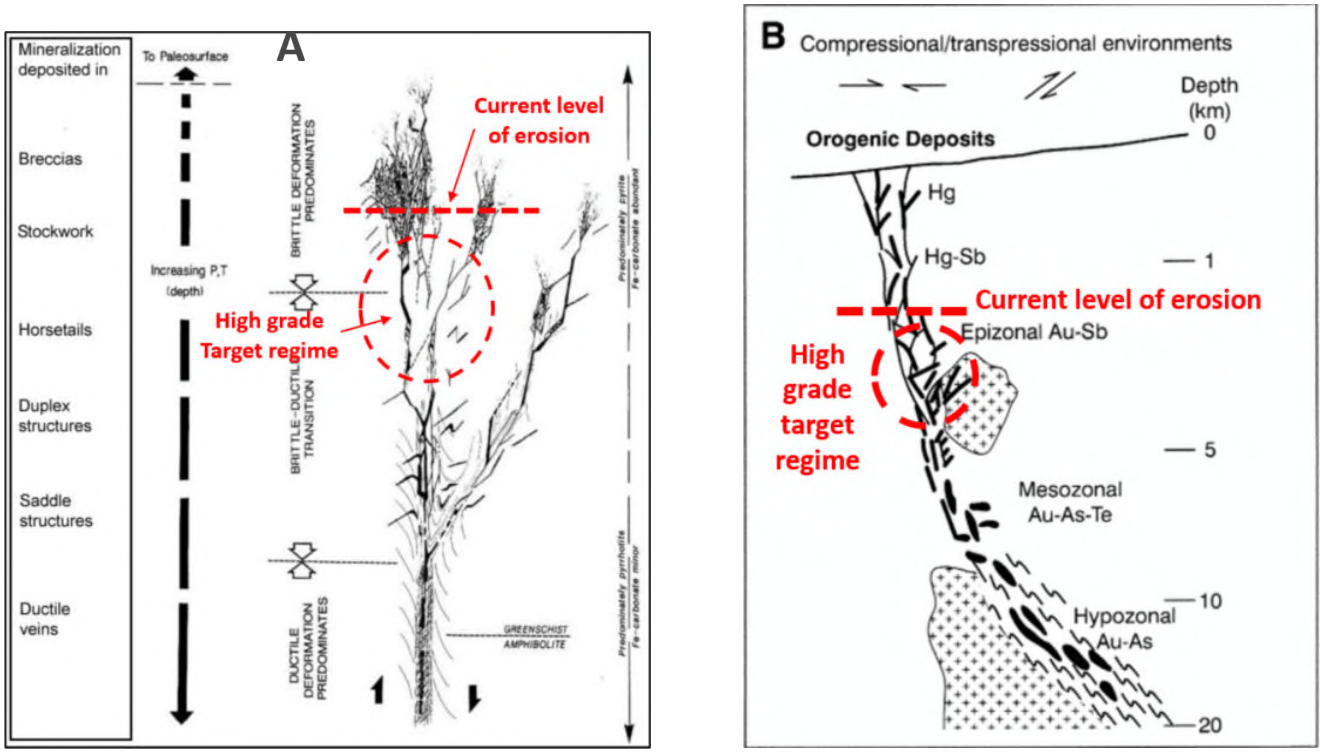


***Figure 12:** Schematic sections showing the postulated high-grade target regime within an orogenic/IRGS setting, the zonation of (A) the host structural manifestation and (B) associated geochemical signatures, with depth. The current level of erosion suggests the upper brittle breccia position with high level Au-As-Sb above or distal to an intrusive source is exposed at surface above the targeted high-grade regime.*

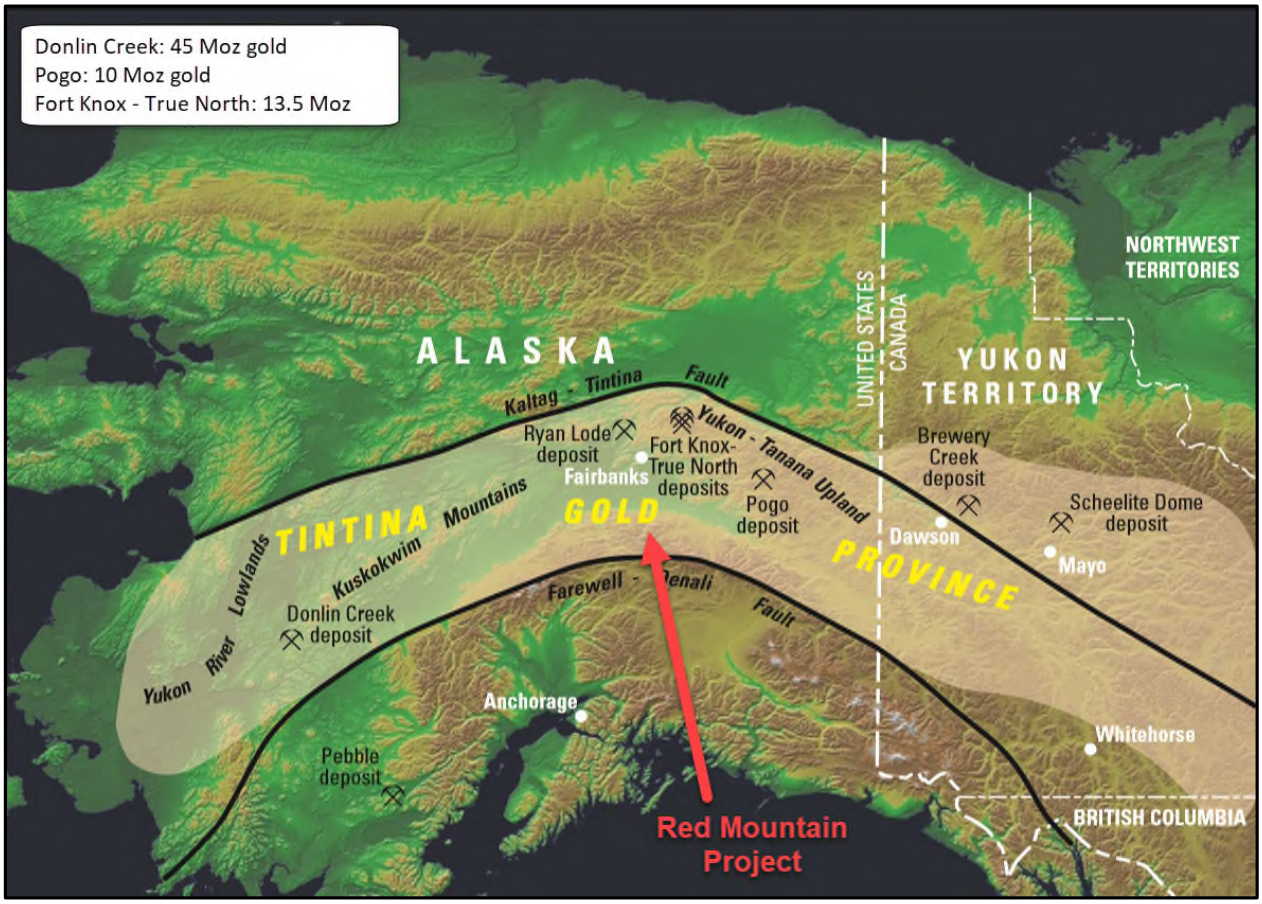


***Figure 13**: Location of the Red Mountain Project (including the Last Chance gold target) within the Tintina Gold Province and its major gold deposits including Donlin Creek (45Moz Au; NovaGold & Barrick), Pogo (10 Moz Au; Northern Star) and Fort Knox (13.5Moz Au; Kinross).*

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.*

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.

[1] *Refer ASX Announcement 28th January 2020 "Large Gold Anomaly Discovered, Tintina Gold Province, Alaska".*

[2] *Total Reserve and Resource gold ounces; NovaGold Resources Inc., NI43-101 Report, Updated Feasibility Study (amended) 20 January 2012*

[3] *Combined production and remaining Resource gold ounces for Fort Knox – True North; Production figures from Special Report 74, State of Alaska's Mineral Industry 2018, DNR, DGGS; Resource figures from Kinross Gold Corporation 2018 Mineral Resource Statement inclusive of Reserves, News Release dated 13 February 2019.*

[4] *Combined production and remaining Resource gold ounces; Production figures from Special Report 74, State of Alaska's Mineral Industry 2018, DNR, DGGS; Resource figures from Northern Star Resources Limited June 2019 Mineral Resource Statement inclusive of Reserves, 2019 Annual Report.*

[5] *Refer ASX Announcement 26th April 2017 "Maiden JORC Mineral Resource, Red Mountain".*

[6] *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% x 2,425 x 0.9) + (Pb% x 2,072 x 0.75) + (Cu% x 6,614 x 0.70) + (Ag g/t x (21.00/31.1035) x 0.70) + (Au g/t x (1,732/31.1035) x 0.80)] / (2,425 x 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.*

[7] *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 x [(Zn% x 2,425 x 0.9) + (Pb% x 2,072 x 0.75) + (Cu% x 6,614 x 0.70) + (Ag g/t x (21.00/31.1035) x 0.70) + (Au g/t x (1,732/31.1035) x 0.80)] / (21.00/31.1035 x 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.*

# 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.*<br>• *Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.*<br>• *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.<br>• Soil samples are analysed using a handheld Olympus Vanta XRF analyser, calibrated in "Soil" mode.<br>• Rock chip samples are grab samples.<br>• Rock chip samples are submitted to ALS (Fairbanks) or Bureau Veritas (Fairbanks) for preparation and analysis.<br>• All 2021 drilling was diamond core from surface.<br>• Core sampling is at 0.2 to 1.5m intervals for mineralisation. Sample intervals are determined by geological characteristics.<br>• Core is split in half by core saw for external laboratory preparation and analysis.<br>• Based on the distribution of mineralisation the core sample size is considered adequate for representative sampling. |
| *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).* | • All 2021 drilling was diamond core from surface using a combination PQ, HQ3, NQ3 and BQ. HQ3 and NQ3 core is triple tube. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *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.* | • Drilling methods are selected to ensure maximum recovery possible. The maximum core length possible in competent ground is 5 feet (1.53m).<br>• Core recovery is recorded on paper drill logs then transferred to the digital database.<br>• A link between sample recovery and grade is not apparent. |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • All diamond core undergoes geotechnical and geological logging to a level of detail (quantitative and qualitative) sufficient to support use of the data in all categories of Mineral Resource estimation.<br>• All core is photographed wet and dry.<br>• All drill holes are logged in full. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representativity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | • Soil samples do not undergo any sample preparation prior to analysis by handheld XRF.<br>• Core is split in half by core saw and sampled except for BQ core which is sampled whole.<br>• Rock chip and core 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.<br>• Full QAQC system is in place for soil, rock chip and core assays to determine accuracy and precision of assays<br>• Field duplicate samples are collected for soil samples.<br>• No field duplicate samples are collected for rock chip or drill core samples.<br>• 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.*<br>• *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.*<br>• *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.<br>• 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.<br>• Rock chip and core samples are submitted to ALS (Fairbanks) or Bureau Veritas (Fairbanks) for analysis.<br>• 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.<br>• 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.<br>• 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).<br>• The nature and quality of the analytical technique is deemed appropriate for the mineralisation style.<br>• Full QAQC system is in place for rock chip and core 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.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All assay results are checked and verified by alternative company personnel or independent consultants. Significant assay results prompt a visual review of relevant reference rock chip and core for validation purposes.<br>• No twin holes are reported.<br>• Surface sample information is documented in digital field notebooks and subsequently merged into the digital database.<br>• All drill data is logged onto paper logs and subsequently entered into the digital database.<br>• All drilling logs are validated by the supervising geologist.<br>• All hard copy data is filed and stored. Digital data is filed and stored with routine local and remote backups.<br>• Handheld XRF results for soil samples are downloaded directly from the handheld XRF and merged into the database.<br>• Assay results from ALS and Bureau Veritas for rock chip and core samples are downloaded directly from ALS or Bureau Veritas and merged into the database.<br>• 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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • Soil and rock chip sample locations are collected using a handheld GPS (accuracy +/- 5m).<br>• All soil and rock chip sample locations are recorded in Longitude/Latitude (WGS84).<br>• All diamond drill holes are surveyed by handheld GPS in the first instance. Drill holes are subsequently surveyed using an RTK-DGPS for surface position (XYZ) of collars (accuracy ±0.1m).<br>• Topographic control is provided by a high resolution IFSAR DEM (high resolution radar digital elevation model) acquired in 2015. Accuracy of the DEM is ±2m. Subsequent surveying by RTK-DGPS supersedes the IFSAR DEM. |

| Criteria | JORC Code explanation | Commentary |
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| | | • All diamond holes are surveyed downhole via a singleshot camera at approximately 30m intervals to determine accurate drill trace locations.<br>• There is no magnetic interference with respect to downhole surveys.<br>• All coordinates are quoted in UTM (NAD27 for Alaska Zone 6 datum). |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Data spacing is variable and appropriate to the purpose of sample survey type.<br>• Sample compositing is not applicable in reporting exploration results.<br>. |
| *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.*<br>• *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.<br>• Mineralisation is dominantly orientated parallel to bedding.<br>• The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.<br>• Reported intersections are down-hole intervals and not true widths. Where there is sufficient geological understanding true width estimates are stated. |
| *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.<br>• 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.<br>• Core is cut and sampled on site then secured in bags with a security seal that is verified on receipt by ALS 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.*<br>• *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').<br>• 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.<br>• 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.<br>• 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").<br>• 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.<br>• Intrusion related gold system ("IRGS") mineralisation located in the Bonnifield District, located in the Tintina Gold Province.<br>• The regional geology consists of an east-west trending |

| Criteria | JORC Code explanation | Commentary |
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| | | schist belt of Precambrian and Palaeozoic meta-sedimentary 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:*<br>  ○ *easting and northing of the drill hole collar*<br>  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>  ○ *dip and azimuth of the hole*<br>  ○ *down hole length and interception depth*<br>  ○ *hole length.*<br>• *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.* | • A table of completed drill hole collar information for exploration results presented here is provided below. |
| *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.*<br>• *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.*<br>• *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.*<br>• *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>• *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').* | • Mineralisation at Dry Creek is steep towards the north (60° to 80° towards 350°).<br>• Mineralisation at Hunter is moderate to steep towards the north (45° to 75° towards 360°). |
| *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 sections and tables 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.<br>• 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).* | • The 2021 field season is progressing as outlined in the body of the report. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | |

| Prospect | HoleID | East NAD27 | North NAD27 | RL metres | Azimuth True | Dip | Depth metres | Depth feet |
|---|---|---|---|---|---|---|---|---|
| Dry Creek | DC21-97 | 480318 | 7088634 | 1260 | 165 | -57 | 520.9 | 1709 |
| Megan | DC21-98 | 483984 | 7088410 | 1033 | 180 | -80 | 65.2 | 214 |
| Megan | DC21-99 | 483984 | 7088409 | 1033 | 180 | -75 | 418.8 | 1374 |
| Dry Creek | DC21-100 | 480174 | 7088492 | 1338 | 165 | -58 | 598.0 | 1962 |
| DC East | DC21-101 | 481997 | 7089017 | 1030 | 165 | -45 | 303.3 | 995 |
| Hunter | HR21-07 | 473907 | 7088111 | 1578 | 190 | -45 | 246.4 | 808.5 |
| BB | LC21-09 | 446626 | 7085699 | 1438 | 205 | -45 | 379.8 | 1246 |