

## New Massive Sulphide Mineralisation Drill Intercepts Coincident with Geophysics Anomalies at Red Mountain

ASX Code: WRM

### Issued Securities

Shares: 1,256 million  
Options: 380 million

Cash on hand (31 Mar 2018)  
\$1.8M

Market Cap (19 June 2018)  
\$10.0M at \$0.008 per share

### Directors & Management

Brian Phillips  
Non-Executive Chairman

Matthew Gill  
Managing Director &  
Chief Executive Officer

Peter Lester  
Non-Executive Director

Ian Smith  
Non-Executive Director

Jeremy Gray  
Non-Executive Director

Shane Turner  
Company Secretary

Rohan Worland  
Exploration Manager

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- Drilling to test for down dip extensions at the Dry Creek zinc VMS deposit intersects massive sulphide mineralisation at the Discovery lens,
- Drill hole DC18-79 intersects 6.1m (downhole) with abundant visual zinc (sphalerite) and lead (galena) mineralisation,
- Orientation geophysics confirms strong conductivity anomalies are coincident with massive sulphide mineralisation,
- CSAMT geophysics surveys have now commenced across other high priority target areas ahead of drill testing and potentially future discoveries.

White Rock Minerals Ltd (“White Rock” or the “Company”) is pleased to announce that orientation geophysics at its 100% owned high-grade zinc VMS project at Red Mountain in Alaska has confirmed that the Dry Creek massive sulphide mineralisation is coincident with strong conductivity anomalies that are identified using both the CSAMT geophysics exploration tool (Figure 1) and time domain electromagnetics geophysics (“EM”). This successful orientation work allows White Rock to progress with confidence in applying the more rapid acquisition of CSAMT data across priority target areas, prior to drill testing.

At Dry Creek, the first drill hole (DC18-79) at the Discovery zone targeted the down-dip extension of the Resource. Drilling intersected massive sulphide mineralisation with abundant sphalerite (zinc), pyrite and galena (lead) from 230.6 to 236.7 metres (6.1m) downhole (estimated true width of 3.9m) (Figure 2). This hole is some 60 metres from the nearest hole (DC97-26).

Figure 1 highlights the coincidence of the CSAMT conductivity anomaly with massive sulphide mineralisation intersected in historic drill holes at the Discovery lens. Drill hole DC18-79 intersected the massive sulphide zone of abundant sphalerite and galena in the core of the CSAMT anomaly. The coincidence of conductivity and massive sulphide mineralisation rich in sphalerite provides confidence in applying the CSAMT technique to define other targets for drill testing in new prospective areas prioritised by favourable geological observations and anomalous surface geochemistry.

**MD & CEO Matt Gill said** “We are delighted with the results of the orientation geophysics. The stark conductivity anomaly results seen and their coincidence with known massive sulphide mineralisation gives White Rock a powerful exploration tool with which to identify new targets for drill testing, hopefully leading to resource expansion and the discovery of new deposits. Further, this latest drill hole intercept of massive sulphides supports our belief that there is further potential for the discovery of more high-grade VMS mineralisation and that this resource is also open down-dip.”

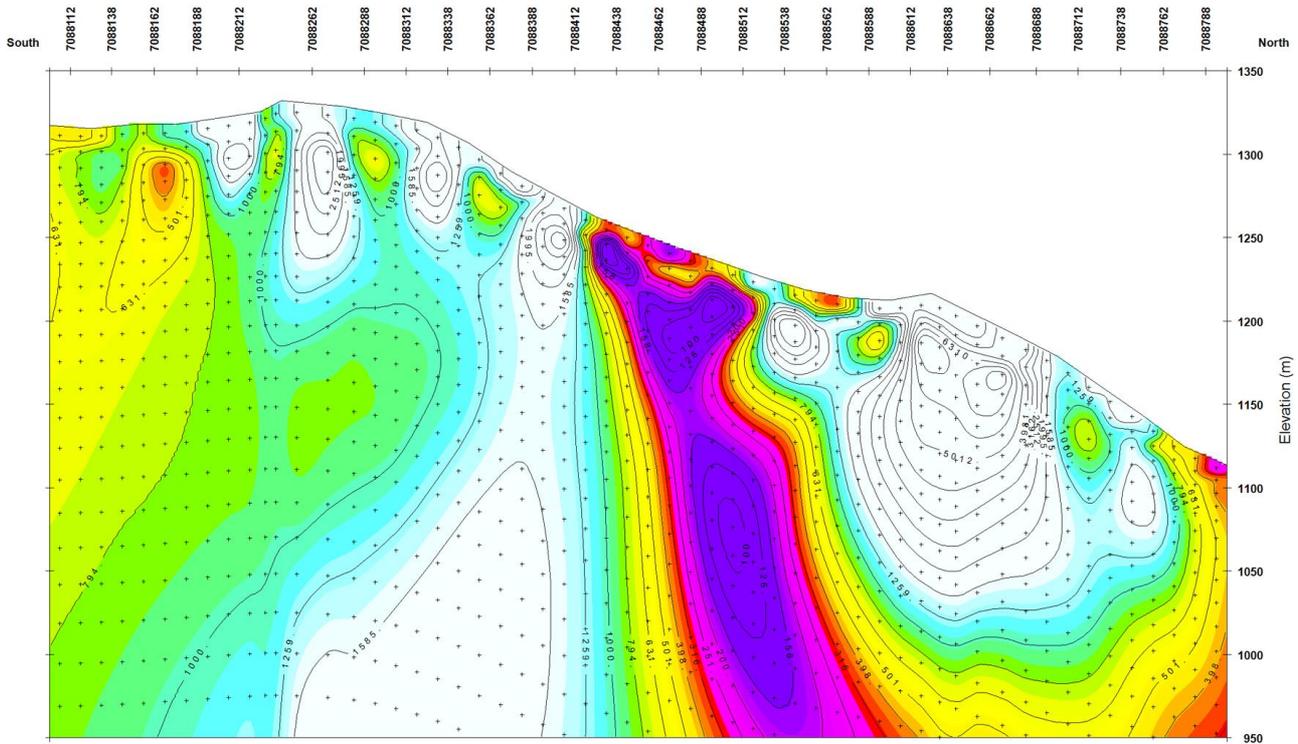


Figure 1a (above): 2D inversion model of CSAMT resistivity data at Discovery lens of Dry Creek deposit – refer Figure 3 for line location.

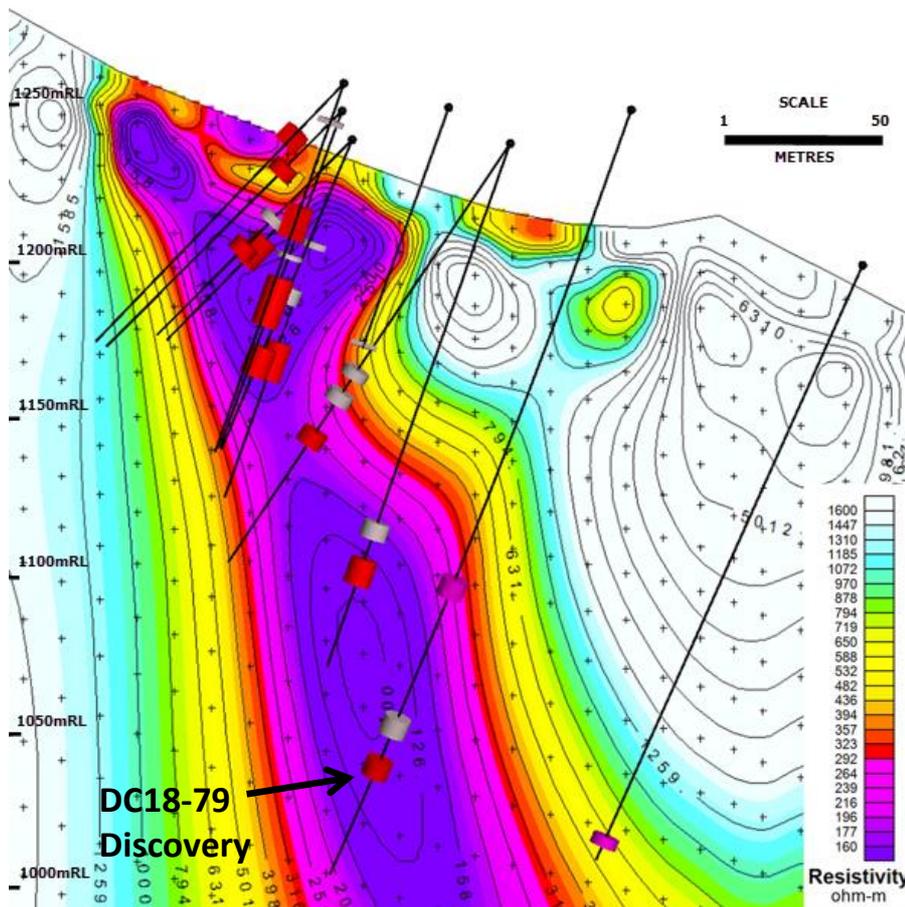
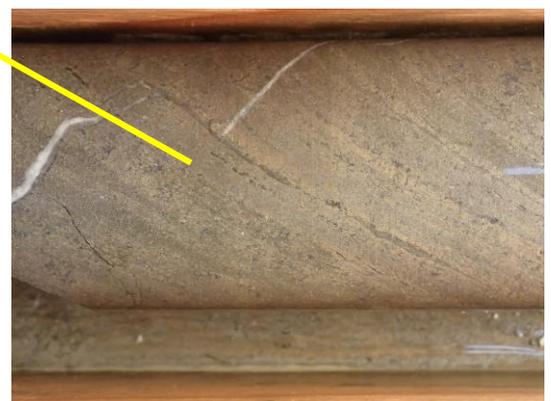
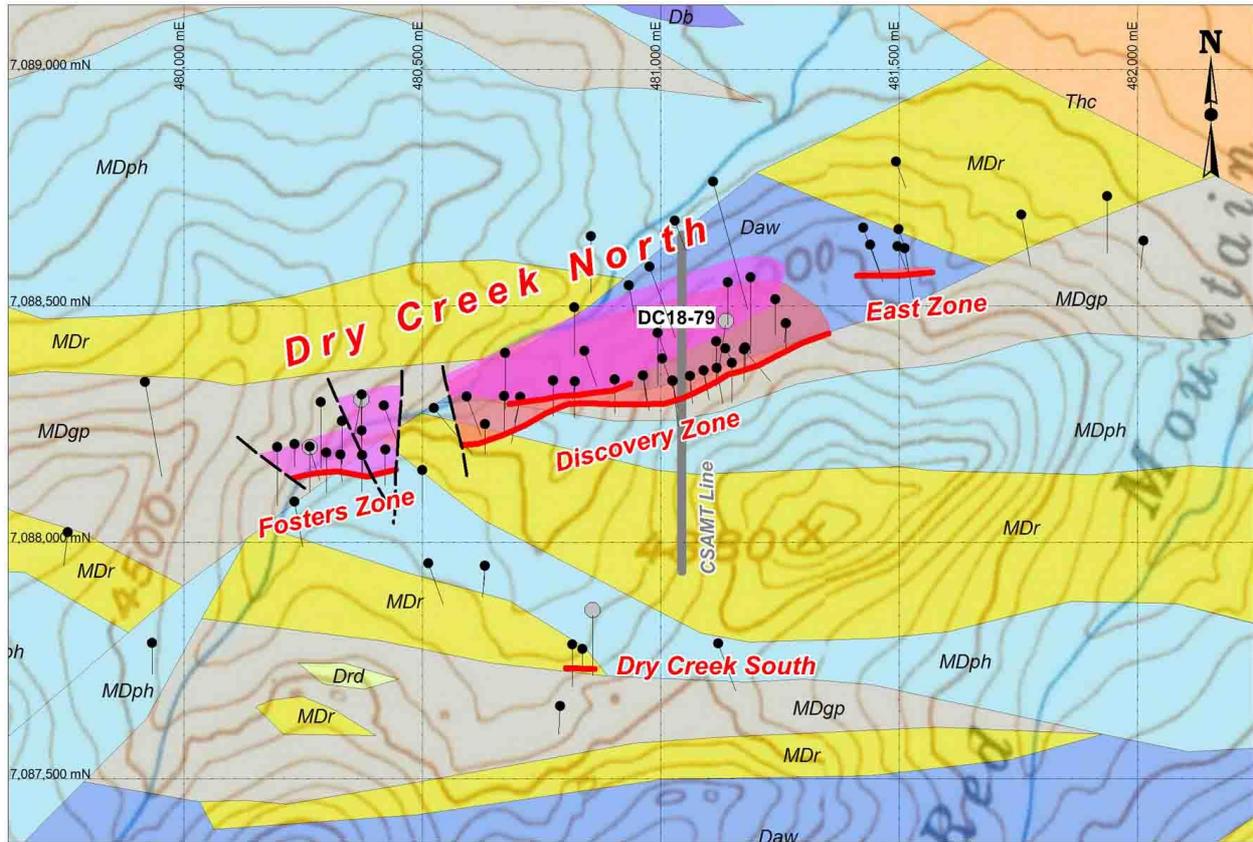


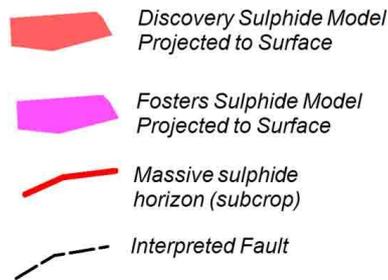
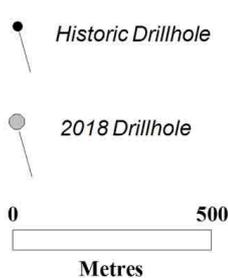
Figure 1b (left): Oblique section looking west southwest ( $250^\circ$  true) showing the 2D inversion model of CSAMT resistivity data with the highest conductivity response highlighted in purple. View is along strike of the main Discovery horizon of massive sulphide mineralisation and shows the coincidence with massive sulphide drill hole intercepts for the Discovery (red drill trace), Copper (grey drill trace) and Fosters (pink drill trace) zones projected along strike. The massive sulphide intercept in DC18-79 reported in this announcement is labelled.

Figure 2: DC18-79 drill core showing massive sulphide mineralisation from 230.6 to 236.7 metres (756.5 to 776.5 feet).





**Red Mountain Project, Alaska  
Dry Creek VMS Deposits**



Tertiary	Thc	Tertiary gravels
Mississippian - Devonian	MDph	Tuffaceous phyllite
	MDr	Metarhyolite
	MDgp	Graphitic schist
	Daw	Meta-arkosic sediments
	Db	Metabasalt

Figure 3: Dry Creek prospect showing surface projection of massive sulphide mineralisation lens' and the location of DC18-79 with respect to all historic drill hole traces and the orientation CSAMT line on the DGGs geology map (after Freeman et al., 2016).

**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.

**About Red Mountain** (as more fully set out in the ASX Announcement dated 15 February 2016)

- The Red Mountain Project is located in central Alaska, 100km south of Fairbanks, in the Bonnifield Mining District. The tenement package comprises 230 mining claims over a total area of 143km<sup>2</sup>.
- The Red Mountain Project contains polymetallic VMS mineralisation rich in zinc, silver and lead, with potential for significant gold and copper.
- Mineralisation occurs from surface and is open along strike and down-dip.
- White Rock used historical drilling to determine a maiden JORC 2012 Mineral Resource estimate for the Dry Creek and West Tundra Flats deposit (ASX Announcement 26<sup>th</sup> April 2017). The Inferred Mineral Resource contains an impressive base metal and precious metal content with 678,000t zinc, 286,000t lead, 53.5 million ounces silver and 352,000 ounces gold.



**Table 1 - Red Mountain April 2017 Inferred Mineral Resource Estimate<sup>2</sup>**

Prospect	Cut-off	Tonnage	ZnEq <sup>3</sup>	Zn	Pb	Ag	Cu	Au	ZnEq	Zn	Pb	Ag	Cu	Au
		Mt	%	%	%	g/t	%	g/t	kt	kt	kt	Moz	kt	koz
Dry Creek Main	1% Zn	9.7	5.3	2.7	1.0	41	0.2	0.4	514	262	98	12.7	15	123
West Tundra Flats	3% Zn	6.7	14.4	6.2	2.8	189	0.1	1.1	964	416	188	40.8	7	229
Dry Creek Cu Zone	0.5% Cu	0.3	3.5	0.2	0.04	4.4	1.4	0.1	10	0.5	0.1	0.04	4	1
<b>Total</b>		<b>16.7</b>	<b>8.9</b>	<b>4.1</b>	<b>1.7</b>	<b>99</b>	<b>0.2</b>	<b>0.7</b>	<b>1,488</b>	<b>678</b>	<b>286</b>	<b>53.5</b>	<b>26</b>	<b>352</b>

**Table 2 - Red Mountain April 2017 Inferred Mineral Resource Estimate<sup>2</sup> at a 3% Zn Cut-off (contained within Table 1, not additional)**

Prospect	Cut-off	Tonnage	ZnEq <sup>3</sup>	Zn	Pb	Ag	Cu	Au	ZnEq	Zn	Pb	Ag	Cu	Au
		Mt	%	%	%	g/t	%	g/t	kt	kt	kt	Moz	kt	koz
Dry Creek Main	3% Zn	2.4	8.7	4.7	1.9	69	0.2	0.4	211	115	46	5.3	5	32
West Tundra Flats	3% Zn	6.7	14.4	6.2	2.8	189	0.1	1.1	964	416	188	40.8	7	229
<b>Total</b>		<b>9.1</b>	<b>12.9</b>	<b>5.8</b>	<b>2.6</b>	<b>157</b>	<b>0.1</b>	<b>0.9</b>	<b>1,176</b>	<b>531</b>	<b>234</b>	<b>46.1</b>	<b>12</b>	<b>260</b>

<sup>2</sup> The Red Mountain Mineral Resource information was prepared and first disclosed under the JORC Code 2012 as per the ASX Announcement by White Rock Minerals Ltd on 26<sup>th</sup> April 2017.

<sup>3</sup> Zinc equivalent grades are estimated using long-term broker consensus estimates compiled by RFC Ambrian as at 20 March 2017 adjusted for recoveries derived from historical metallurgical testing work and calculated with the formula:  

$$\text{ZnEq} = 100 \times \left[ \frac{(\text{Zn}\% \times 2,206.7 \times 0.9) + (\text{Pb}\% \times 1,922 \times 0.75) + (\text{Cu}\% \times 6274 \times 0.70) + (\text{Ag g/t} \times (19.68/31.1035) \times 0.70) + (\text{Au g/t} \times (1,227/31.1035) \times 0.80)}{2,206.7 \times 0.9} \right]$$

White Rock is of the opinion that all elements included in the metal equivalent calculation have reasonable potential to be recovered and sold.

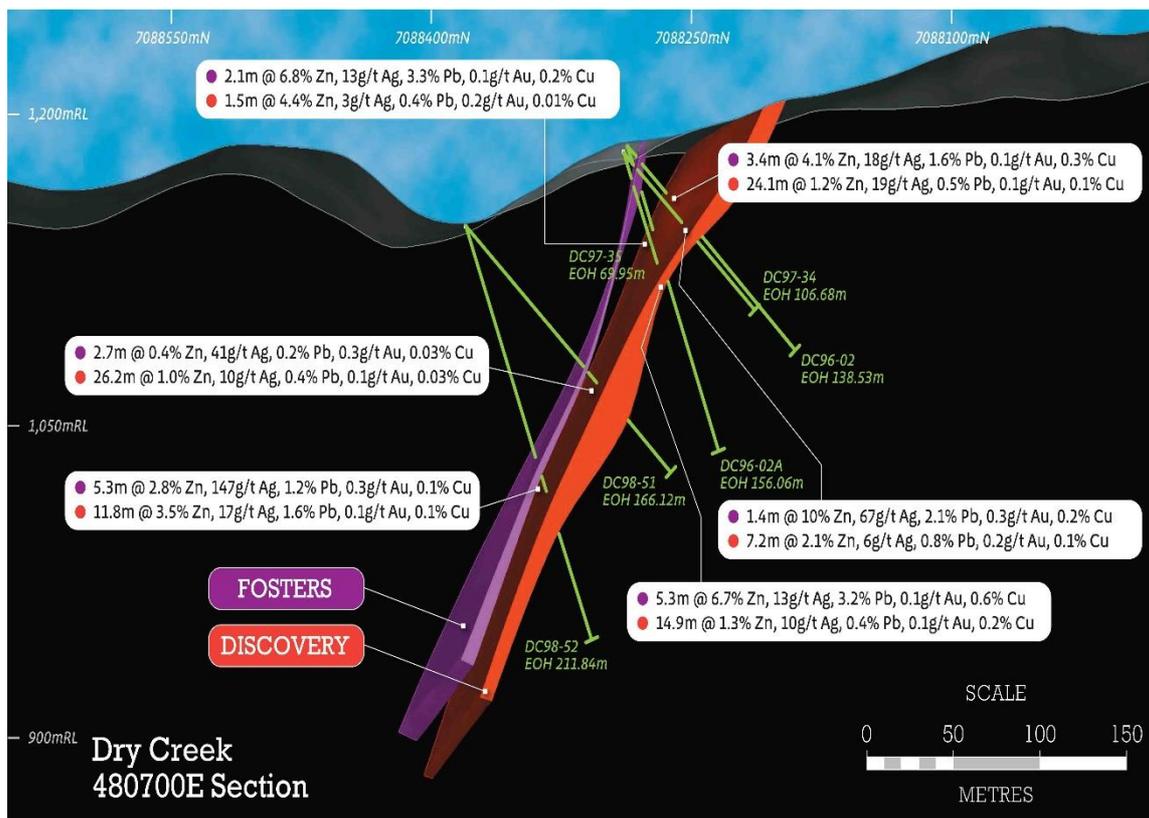
- Good preliminary metallurgical recoveries of >90% zinc, >75% lead, >80% gold, >70% silver and >70% copper.
- Previous drilling highlights (ASX Announcement 15<sup>th</sup> February 2016) include:

#### **Dry Creek**

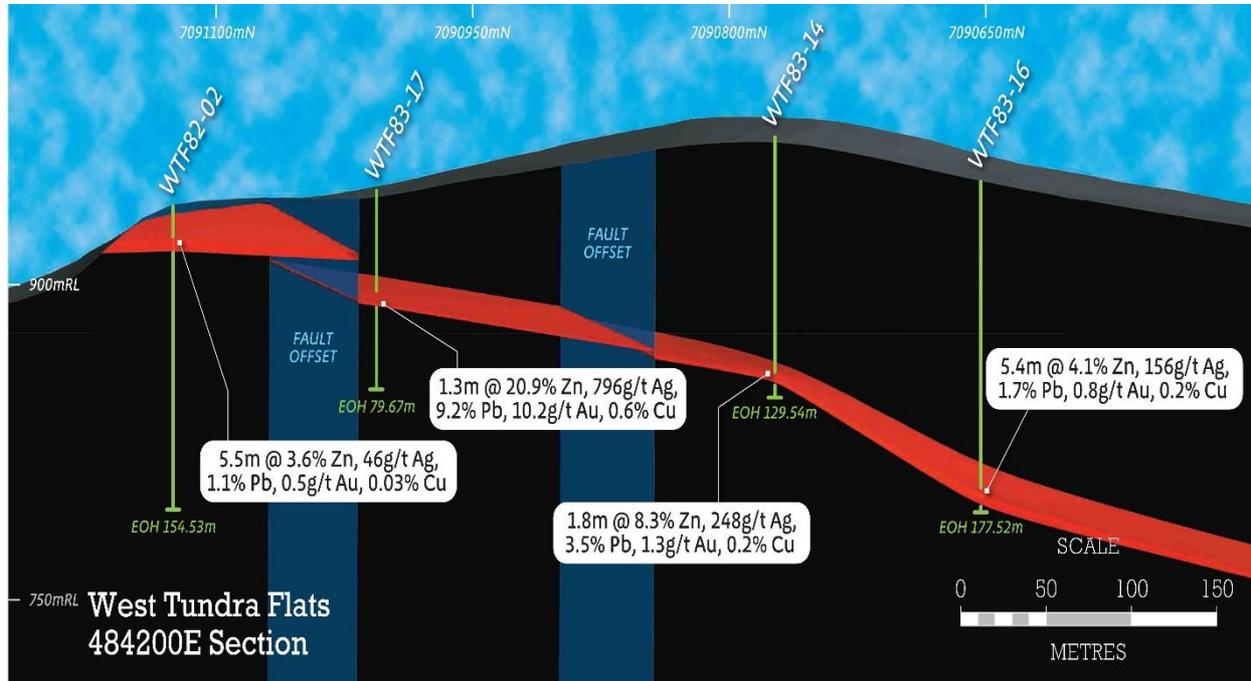
- 4.6m @ 23.5% Zn, 531g/t Ag, 8.5% Pb, 1.5g/t Au & 1.0% Cu from 6.1m
- 5.5m @ 25.9% Zn, 346g/t Ag, 11.7% Pb, 2.5g/t Au & 0.9% Cu from 69.5m
- 7.1m @ 15.1% Zn, 334g/t Ag, 6.8% Pb, 0.9g/t Au & 0.3% Cu from 39.1m

#### **West Tundra Flats**

- 1.3m @ 21.0% Zn, 796g/t Ag, 9.2% Pb, 10.2g/t Au & 0.6% Cu from 58.6m
- 3.0m @ 7.3% Zn, 796g/t Ag, 4.3% Pb, 1.1g/t Au & 0.2% Cu from 160.9m
- 1.7m @ 11.4% Zn, 372g/t Ag, 6.0% Pb, 1.7g/t Au & 0.2% Cu from 104.3m



**Figure 5:** Cross-section 480,700E looking towards the east through the Dry Creek deposit showing the geometry of the Fosters and Discovery mineralised massive sulphide lenses and drill intercepts.



**Figure 6:** Cross-section 484,200E looking towards the east through the West Tundra Flats deposit showing the mineralised massive sulphide lens and drill intercepts.

- VMS deposits typically occur in clusters (“VMS camps”). Deposit sizes within camps typically follow a log normal distribution, and deposits within camps typically occur at regular spacing. The known deposits at Dry Creek and West Tundra Flats provide valuable information with which to vector and target additional new deposits within the Red Mountain camp.
- Interpretation of the geologic setting indicates conditions that enhance the prospectivity for gold-rich mineralisation within the VMS system at Red Mountain. Gold mineralisation is usually found at the top of VMS base metal deposits or adjacent in the overlying sediments. Gold bearing host rocks are commonly not enriched in base metals and consequently often missed during early exploration sampling. This provides an exciting opportunity for potential further discoveries at Red Mountain.
- White Rock sees significant discovery potential, given the lack of modern day exploration at Red Mountain. This is further enhanced by the very nature of VMS clustering in camps, and the potentially large areas over which these can occur.

For more information about White Rock and its Projects, please visit our website

[www.whiterockminerals.com.au](http://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	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was diamond core from surface.</li> <li>Sampling is at 0.3 to 1.5m intervals for mineralisation. Sample intervals are determined by geological characteristics.</li> <li>Core is split in half by core saw for external laboratory preparation and analysis.</li> <li>Based on the distribution of mineralisation the sample size is considered adequate for representative sampling.</li> <li>Drill core from DC18-79 is being cut and sampled prior to being sent to ALS laboratory for analysis of gold and base metals.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was diamond core from surface. The upper portion of the drill hole is drilled with HQ diameter then cased off from solid rock and drilled with NQ2 diameter. NQ2 core is standard tube wireline with no core orientation.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Drilling methods are selected to ensure maximum recovery possible. The maximum core length possible in competent ground is 5 feet (1.53m).</li> <li>Core recovery is recorded on paper drill logs then transferred to the digital database.</li> <li>Sample assays not yet received.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>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.</li> <li>All core is photographed wet and dry.</li> <li>All drill holes are logged in full.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Core is split in half by core saw and sampled.</li> <li>Core samples are submitted to ALS (Fairbanks) and undergo standard industry procedure sample preparation (crush, pulverise and split) appropriate to the sample type and mineralisation style.</li> <li>Full QAQC system is in place to determine accuracy and precision of assays.</li> <li>Core is cut to achieve non-biased samples.</li> <li>Sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Core samples are submitted to ALS (Fairbanks) for analysis. Au is assayed by technique Au-AA25 (30g by fire assay and AAS finish). Multi-element suite of 48 elements including Ag 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.</li> <li>Fire assay for Au by technique Au-AA25 is considered total. Multi-element assay by technique ME-MS61 and OG62 are considered near-total for all but the most resistive minerals (not of relevance).</li> <li>The nature and quality of the analytical technique is deemed appropriate for the mineralisation style.</li> <li>Full QAQC system is in place including blanks and standards (relevant certified reference material).</li> <li>No assay data reported.</li> <li>No handheld XRF values are reported.</li> <li>Geophysics CSAMT Survey Specifications <ul style="list-style-type: none"> <li>Controlled-Source, Audio-Frequency, Magnetotelluric (CSAMT) survey.</li> <li>Array: Scalar broadside, spreads consisting of four Ex and one Hy.</li> <li>Line Orientation: north-south, Ex downline, + to north, Hy Crossline,+ to west.</li> <li>Receiver Dipole Length: 25m, station spacing: 25m.</li> <li>Frequency Range: 1 Hz to 8192 Hz, in binary increments.</li> <li>Transmitter Bipole: 1600m length, oriented north-south, center located at 488869E, 7087045N.</li> </ul> </li> <li>Geophysics CSAMT Instrumentation <ul style="list-style-type: none"> <li>Transmitter: Zonge GGT10, 10KVA, Zonge ZMG-9, 9 KVA motor-generator.</li> <li>Transmitter Current: 0.8 to 1.3 A.</li> <li>Transmitter Voltage: 650 A.</li> <li>Receiver: Zonge GDP-3224, 8 channels.</li> <li>Sample rate: 32 KHz.</li> <li>CuCuSO4, porous pot electrodes with buffer preamplifiers connected to receiver with shielded dual conductor cable.</li> </ul> </li> <li>Geophysics CSAMT Processing Software: <ul style="list-style-type: none"> <li>Zonge CSAVGW, QC and data processing.</li> <li>Zonge: SCS2D, 2D far-field CSAMT inversion.</li> </ul> </li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>No assay data reported.</li> <li>No twin holes reported.</li> <li>All data is logged onto paper logs and subsequently entered into the digital database.</li> <li>All drilling logs are validated by the supervising geologist.</li> <li>All hard copy data is filed and stored. Digital data is filed and stored with routine local and remote backups.</li> <li>No adjustment to assay data is undertaken.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>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).</li> <li>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.</li> <li>All diamond holes are surveyed downhole via a singleshot camera at approximately 30m intervals to determine accurate drill trace locations.</li> <li>There is no magnetic interference with respect to downhole surveys.</li> <li>All coordinates are quoted in UTM (NAD27 for Alaska Zone 6 datum).</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Data spacing (drill holes) is variable and appropriate to the geology.</li> <li>Sample compositing is not applicable in reporting exploration results.</li> </ul>
Orientation	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves</li> </ul>	<ul style="list-style-type: none"> <li>No significant orientation based sampling bias is known at this</li> </ul>

Criteria	JORC Code explanation	Commentary
<i>of data in relation to geological structure</i>	<p><i>unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></p> <ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<p>time.</p> <ul style="list-style-type: none"> <li>Mineralisation is dominantly orientated parallel to bedding.</li> <li>The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.</li> <li>Reported intersections are down-hole intervals and not true widths.</li> </ul>
<i>Sample security</i>	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Audits or reviews</i>	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been completed to date.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Red Mountain Project comprises 206 mining locations and 24 leasehold locations in the State of Alaska ('the Tenements').</li> <li>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.</li> <li>The Tenements are subject to an agreement with Metallogeny Inc, that requires further cash payments of US\$850,000 over 3 years and further exploration expenditure totalling US\$900,000 over 3 years. 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.</li> <li>All of the Tenements are current and in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>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").</li> <li>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.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>Volcanogenic massive sulphide ("VMS") mineralisation located in the Bonnifield District, located in the western extension of the Yukon Tanana terrane.</li> <li>The regional geology consists of an east-west trending 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 which is of Carboniferous to Devonian age.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>A table of all drill hole collar information for exploration results presented here is provided below.</li> </ul>
<i>Data</i>	<ul style="list-style-type: none"> <li><i>In reporting Exploration Results, weighting</i></li> </ul>	<ul style="list-style-type: none"> <li>No assay data reported.</li> </ul>

Criteria	JORC Code explanation	Commentary
aggregation methods	<p>averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</p> <ul style="list-style-type: none"> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Zinc equivalent values are based on long-term consensus estimates compiled by RFC Ambrian as at 20 March 2017 of Zn US\$2,206.70/t, Pb US\$1,922/t, Cu US\$6,274/t, Au US\$1,227/oz, Ag US\$19.68/oz, taking into account relative recoveries of 90% Zn, 75% Pb, 70% Cu, 80% Au &amp; 70% Ag from preliminary metallurgical test work.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>Mineralisation at Dry Creek in the Discovery zone at this location is steep towards the north (80° towards 340°). DC18-79 intersected mineralisation at approximately 40°.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps, sections and tables are included in the body of the report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No assay data reported.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>In 1998 Grayd commissioned metallurgical test work on a composite sample of drill core intersections from the Fosters deposit. The ore responded well to a traditional flotation scheme producing a bulk lead concentrate and a separate zinc concentrate with excellent metal recoveries.</li> <li>Zinc recoveries were in excess of 98% of the available zinc. Lead recoveries were approximately 75-80% of the available lead. Silver, copper and gold reported to the lead concentrate. Recoveries of these metals were in the range of 70% to 80%.</li> <li>The zinc concentrate produced was of very high quality with grades ranging from 58% to 62%. Lead-copper concentrate produced by the test work contained approximately 33% lead, with dilution being primarily due to zinc. An evaluation of this concentrate indicated that the mineralogical makeup of the concentrate was simple, and reagent optimization should be capable of upgrading this concentrate to approximately 50% lead. Results from analysis of the zinc concentrate showed low selenium content at &lt;0.01% and typical cadmium values at 0.15%.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Validation and extension drilling of the two deposits at West Tundra and Dry Creek (along strike and down dip) is ongoing. Field crews are actively completing reconnaissance mapping, surface sampling and electrical (CSAMT) geophysics of new targets. Drill testing of a number of new targets is anticipated during the field season.</li> </ul>

Prospect	Hole ID	East NAD27	North NAD27	RL	Azi True	Dip	Depth
Dry Creek - Discovery	DC18-79	481143	7088472	1251	200°	-69°	896ft
							273.1m