

ASX and Media Release: 24 April 2018

**ASX Code: WRM** 

#### White Rock Presents at 1-2-1 Mining Investment Conference, Hong Kong

**ASX Code: WRM** 

Issued Securities

Shares: 1271 million Options: 310 million

Cash on hand (31 Dec 2017)

\$1.4M

Market Cap (23 April 2018)

\$11.4M at \$0.009 per share

**Directors & Management** 

**Brian Phillips** 

Non-Executive Chairman

Matthew Gill

Managing Director & Chief Executive Officer

Chief Executive Off

Peter Lester

Non-Executive Director

Ian Smith

Non-Executive Director

Jeremy Gray

Non-Executive Director

**Shane Turner** 

**Company Secretary** 

Rohan Worland

**Exploration Manager** 

For further information, contact:

Matthew Gill or Shane Turner

Phone: 03 5331 4644

<u>info@whiterockminerals.com.au</u> <u>www.whiterockminerals.com.au</u> White Rock Minerals Ltd ("White Rock" or the "Company") wishes to advise that its Managing Director and Chief Executive Officer, Matt Gill, will today present at the 1-2-1 Mining Investment Conference in Hong Kong.

A copy of the Investor Presentation is attached.

This presentation can also be found on the Company's website.

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

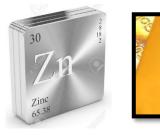
website www.whiterockminerals.com.au

or contact:

Matt Gill (MD&CEO)

Phone: +61 (0)3 5331 4644

Email: info@whiterockminerals.com.au





ZINC & GOLD & SILVER



# "A diversified exploration and near-term production company"



Red Mountain Zinc & Silver & Gold



Drilling at Mt Carrington



Mt Carrington gold deposits

#### **Disclaimer**

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The Presentation contains prospective financial material which is predictive in nature and may be affected by inaccurate assumptions or by known or unknown risks and uncertainties and may differ materially from results ultimately achieved.

The Presentation contains "forward-looking statements". All statements other than those of historical facts included in the Presentation are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward-looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include, but are not limited to, gold and other metals price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks and governmental regulation and judicial outcomes. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement".

The Presentation contains general background information about the Company and its activities current as at the date of this presentation. The information in this Presentation is in summary form only and does not contain all the information necessary to fully evaluate any transaction or investment. It should be read in conjunction with the Company's other periodic and continuous disclosure announcements lodged with the ASX, which are available at <a href="https://www.asx.com.au">www.asx.com.au</a> and other publicly available information on the Company's website at <a href="https://www.whiterockminerals.com.au">www.whiterockminerals.com.au</a>.

The information in this Presentation that relates to Exploration Results is based on information compiled by Mr Rohan Worland who is a Member of the Australian Institute of Geoscientists. Mr Worland is engaged by White Rock Minerals Ltd as a technical consultant. 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'. The Exploration Potential described in this Presentation is conceptual in nature, and there is insufficient information to establish whether further exploration will result in the determination of a Mineral Resource. Mr Worland consents to the inclusion in this Presentation of the matters based on his information in the form and context in which it appears.

At the Mt Carrington Project the gold dominant Mineral Resources have been estimated using a cut-off of 0.5g/t Au except Red Rock, which uses a cut-off of 0.7g/t Au. All silver dominant Mineral Resources have been estimated using a cut-off of 25g/t Ag. The Strauss and Kylo Mineral Resource was prepared and reported in accordance with the JORC Code (2012) as per the ASX Announcement on 9 October 2017. The Red Rock, Guy Bell, Lady Hampden, White Rock, White Rock North and Silver King Mineral Resource was prepared and reported in accordance with the JORC Code (2004) as per ASX Announcements by White Rock Minerals Ltd on 13 February 2012, 11 July 2013 and 20 November 2013, and the ASX Announcement by Rex Minerals Ltd on 10 December 2008. The Resources figures have not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

The pit optimisation study used a Mineral Resource made up of a combination of Indicated and Inferred Resource blocks. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Indicated Mineral Resources or that the production target itself will be realised.

The Mt Carrington Ore Reserve information was prepared and first disclosed under the JORC Code (2012) as per the ASX Announcement by White Rock Minerals Ltd on 27th December 2017.

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. 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: ZnEq =100 x [(Zn% x 2,206.7 x 0.9) + (Pb% x 1,922 x 0.75) + (Cu% x 6274 x 0.70) + (Ag g/t x (19.68/31.1035) x 0.70) + (Au g/t x (1,227/31.1035) x 0.80)] / (2,206.7 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.

This announcement contains references to exploration results, Mineral Resource estimates and ore Reserve 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 and Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed.

### **OVERVIEW**

- 1. Overview of White Rock Minerals
- 2. The Right Commodities zinc, silver and gold
- 3. The Investment Opportunity
- 4. The Assets:-
  - > Red Mountain, Alaska
  - > Mount Carrington, New South Wales
- 5. Appendices







### Two company-making assets

#### **Mount Carrington, New South Wales**

- Gold and Silver development asset.
- JORC resources<sup>1</sup>
  - ✓ 341,000 ounces of gold and 23.2 million ounces silver.
  - ✓ Maiden JORC Reserve of 159,000 ounces gold.
- A Gold-First Pre-Feasibility Study completed.
- 230km south of Brisbane.
- Extensive mining infrastructure in place.
- Drill-ready exploration targets identified to expand and / or extend mine life.

1 The Mt Carrington project hosts JORC estimates of Inferred and Indicated resources, and a Probable Reserve – refer cautionary statement on slide 3



#### **Red Mountain, Alaska**

- Polymetallic VMS deposits.
- JORC resources<sup>2</sup>
  - ✓ <u>Impressive base metal and precious metal</u> <u>content with 678,000t zinc, 286,000t lead, 53.5</u> <u>million ounces silver and 352,000 ounces gold.</u>
- 100km south of Fairbanks, close to extensive mining infrastructure in a mining friendly jurisdiction.
- Significant potential exploration upside in a highly prospective yet under-explored district.
- Outstanding grades from surface and open at depth and at places along strike.

2 The Red Mountain project hosts JORC estimates of Inferred resources

refer cautionary statement on slide 3



# Commodity profile – what we are in to

✓Zinc – in demand



✓ Silver – good upside growth potential



✓ Gold – important in any investment portfolio



- ✓ JORC Resources across our two projects total:-
  - >693,000 ozs gold, 76.7M ozs silver,
  - >678,000 t zinc, 286,000 t lead

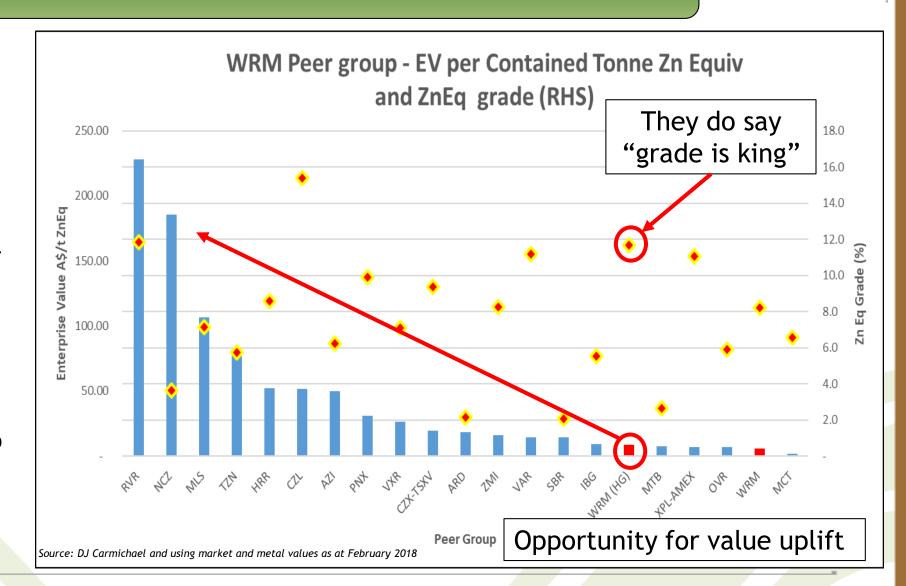


### The Investment Opportunity

- <u>The Red Mountain Project</u> is already a globally significant undeveloped zinc VMS Project <u>12.9% ZnEq<sup>1</sup> grade</u>.
  - ➤ However, there has been no modern exploration on this Project for over 10 years.
  - > A planned **exploration campaign** in 2018 aims **to increase** the known zinc silver lead gold JORC resource.
  - ➤ This **exploration campaign** also aims **to discover** further zinc silver lead gold deposits at Red Mountain.
- This exploration program should generate high levels of news flow.
- There exists a strong potential for significant rerating when compared to our zinc and gold peer groups.
- White Rock offers geological, geographical and commodity diversification for investors Australia and USA.
- Highly credentialed and highly regarded management team and board.
- White Rock also has a second 100% owned project The Mt Carrington Gold First Stage Pre-Feasibility Study has been done, delivering a maiden Reserve and with the first 4 ½ years of gold production from two pits already prestripped.
  - > and with 8 million ounces of silver classified as Indicated Resource to follow.

### **Under-valued Relative to our Zinc Peers**

- The ASX provides limited opportunities for exposure to zinc production and project development assets.
- The peer group suggests that WRM has significant potential for a market rerating.
- Excludes any upside from:
  - exploration potential at Red Mountain
  - No value attributed to White Rock's Mount Carrington gold and silver Project.

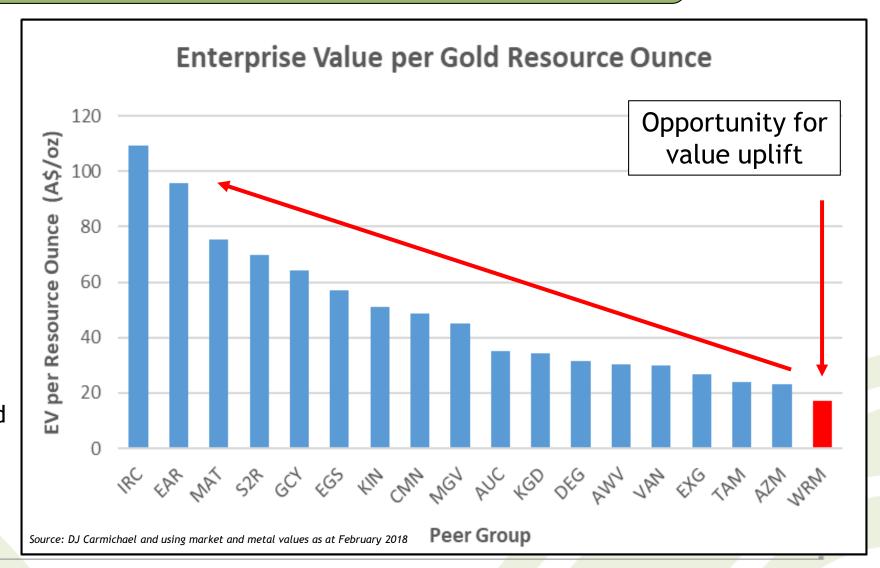


### **Under-valued Relative to our Gold Peers**

- The ASX provides many opportunities for exposure to gold production and project development assets.
- The peer group suggests that WRM has significant potential for a market rerating.

#### **NB:-**

 Excludes any value or upside for our globally significant Red Mountain zinc - silver VMS Project



### **White Rock Minerals**

#### **Capital Structure**

•	ASX Code:	WRM
•	Fully paid shares on issue	1,271M
	<ul> <li>Options unlisted</li> </ul>	310M
•	Share price range (12 months)	1c - 2c
•	Market Cap (@ ~1c/share)	\$12M
•	Debt	\$Nil

Successfully completed a Placement & Entitlement
 Offer to shareholders – raised \$3.6M

\$1.4M

Another \$1.6M to place

Cash on hand (Dec 2017)

Top 20 Shareholders (as at end March 2018)

Top 20 47.9%								
<ul> <li>Suetone P/L</li> </ul>	5.7%							
<ul> <li>Citicorp Noms</li> </ul>	6.2%							
<ul> <li>Avalon Ventures</li> </ul>	7.4%							
<ul> <li>HSBC Custody</li> </ul>	Noms 10.5%							



#### PROJECTS (100% owned)

- Red Mountain, Alaska Zinc and Silver and Gold
  - ➤ Advanced exploration with a JORC Resource
- Mt Carrington, NSW Gold and Silver
  - > JORC Resource and Reserve on an ML and with an advanced DFS

# Highly experienced Board and Management Team

#### **Brian Phillips**

Non Executive Chairman AWASM (Mining), FAusIMM, C Eng



#### Mining Engineer

45 years operational and corporate experience. Founding Director.
Chairman - Panoramic Resources Ltd (Ni-Au-PGM)



Non-Executive Director B.E (Mining), MAusIMM, MAICD



#### Mining Engineer

40 years operational and corporate experience
Director since April 2013
Non-Exec Director of Nord Gold NV (Au), Millennium Minerals Ltd (Au)
Past Chairman Kidman Resources (Au & Li) and Doray Minerals (Au)

#### **lan Smith**

Non-Executive Director
B.E (Hons, Mining), BF in Admin, FIEAust, FAusIMM



#### Mining Engineer

40 years technical, operational, financial and strategic expertise. Previously MD & CEO of Newcrest and Orica Held executive roles with Rio Tinto, WMC, Pasminco and CRA Joined the Board in 2017

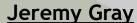
#### **Matt Gill**

MD & CEO
B.Eng (Hons, Mining), M.Eng.Sc, FAuslMM, GAICD



#### Mining Engineer

35 years operational, technical, project development and corporate experience, as a GM, COO, CEO and MD, in Australia and overseas (PNG, India, Bolivia, Ghana and Myanmar)
Non-Exec Director of AuStar Gold (Au)



Non-Executive Director B.C (Hons, Finance)



#### **Corporate Finance**

23 years in mining investment including with Standard Chartered Bank, Morgan Stanley and Credit Suisse Managing Partner of Cartesian Royalty Holdings, Singapore Non-Executive Director of Axiom Mining Joined the Board in 2017



# Red Mountain Project, Alaska

Maiden JORC 2012 Resource places the Red Mountain Project in the top quartile of undeveloped high-grade VMS (zinc, silver, gold) deposits globally<sup>1</sup>.

High grade resource: 9.1Mt @ 12.9% ZnEq (using a 3% Zn cut-off grade)

within the existing 16.7Mt @ 8.9% ZnEq global resource.

Last drilled in the 1990s

1 Refer to WRM release to the ASX of 26 April 2017 – "Maiden JORC Mineral Resource at Red Mountain Zinc Silver Project"

Well supported by surrounding infrastructure



Identified 30 look alike targets to Dry Creek and WTF

### **Priority Conductivity Targets**

Strategically significant land package – expanded out to 143km<sup>2</sup>

0\_\_\_\_1.5\_\_\_3

Sheep Rogers

8 7 29 30 6 Dry Creek 9 ReRun West Rod 10

**Smog North** 

Smog South

Existing deposits & claims area

Conductivity targets prioritised by geochemistry:

Geochemical alteration proximal to VMS mineralisation

**Red Mountain Mining Claims** 

Direct base metal and precious metal anomalies

**Glacier West** 

**Glacier East** 

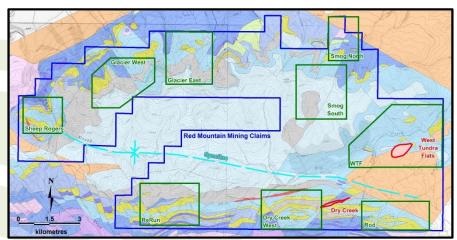
### Historic Work – Resource Potential

Multiple shallow

intercepts indicate

potential for stacked high-grade lodes

- Polymetallic VMS project zinc and silver rich\*
- Discovered in 1975 sulphide outcrop
- Historic exploration from 1975-1999
- Two deposits discovered:
  - Discovery / Fosters (Dry Creek)
  - West Tundra Flats (WTF)
- Mineralisation from surface
- Good preliminary metallurgical test work results with recoveries
   >90% zinc, >75% lead, >80% gold, >70% Ag
- 143km² land position established highly prospective.



**Dry Creek** 

**36.1m** @ 6.2% Zn, 183g/t Ag, 2.5% Pb, 1.0 g/t Au and 0.2% Cu from 6.1m including

4.6m @(23.5% Zn) 531g/t Ag(8.5% Pb,)1.5g/t Au & 1.0% Cu from 6.1m

**68.9m** @ 4.0% Zn, 58g/t Ag, 1.8% Pb, 0.3g/t Au & 0.1% Cu from 17.6m including

4.9m @ 10.1% Zn, 86g/t Ag, 4.9% Pb, 0.3g/t Au & 0.2% Cu from 53.8m

5.5m @ 25.9% Zp 346g/t Ag, 11.7% Pb 2.5g/t Au t 0.9% Cu from 69.5m

7.1m p 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

Refer to WRM release to the ASX of 15 February 2016 – "White Rock Minerals Propose to Acquire VMS Project in Alaska"



### **Red Mountain JORC 2012 Resource Estimate**

#### Tonnes and Grade

#### Contained Metal

Prospect	Cut-off	Tonnage	ZnEq	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
Total		(16.7)	(8.9)	4.1	1.7	99	0.2	0.7	1,488	(678)	286	(53.5)	26	(352)
Iotat		10.7	0.9	7.1	1.7	77	0.2	0.7	1,700	070	200	33.3	20	(3.

#### **Table 1 Red Mountain April 2017 Inferred Mineral Resource Estimate\***

The Red Mountain project hosts JORC estimates of Inferred resources – refer cautionary statement on slide 2

Prospect	Cut-off	Tonnage	ZnEq	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
Total		9.1	(12.9)	5.8	2.6	157	0.1	0.9	1,176	531	234	46.1	12	260

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

<sup>\*</sup> Refer ASX Announcement of 26 April 2017 "Maiden JORC Mineral Resource at Red Mountain Zinc Silver Project"

# Red Mountain – A globally significant Project<sup>2</sup>

The Red Mountain Project is in the top quartile of undeveloped high-grade VMS (zinc, silver, gold) deposits globally<sup>1</sup>.

1 Source:- IIR Report, July 2017. ASX Release 11 July 2017.

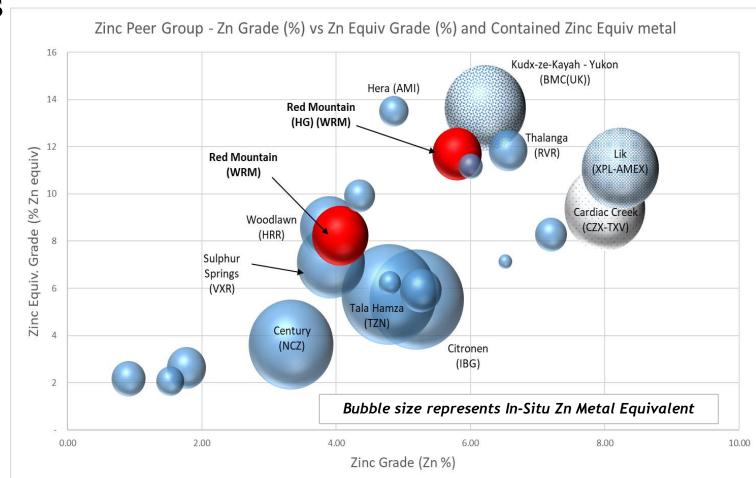
High grade component: Within the existing global resource is a high-grade resource of 9.1Mt at 12.9% Zn equivalent (using a 3% Zn cut-off grade).

This places Red Mountain as one of the highest grade and more significant deposits of any zinc company listed on the ASX<sup>2</sup>.

2 Source: DJ Carmichael Report, September 2017. ASX Release 26 September 2017.

#### Additional scale potential from exploration.

Impressive base metal and precious metal content with 678,000t zinc, 286,000t lead, 53.5 million ounces silver and 352,000 ounces gold.



Source: DJ Carmichael and using market and metal values as at February 2018

### **RED MOUNTAIN PROPOSED EXPLORATION PROGRAM FOR 2018**

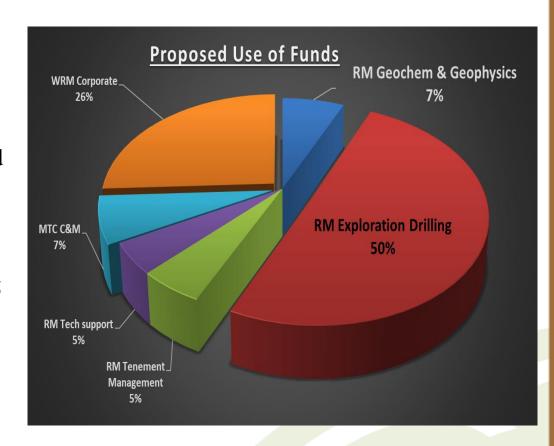
#### **OBJECTIVES**

- 1. Validate existing deposits.
- 2. Expand known Resources.
- 3. Make new discoveries.

#### **EXPLORATION STRATEGY**

#### 1. Existing Deposits:

- a. 5-10 holes to confirm and gather knowledge at Dry Creek and WTF,
- b. 5-10 holes to test for extensions at Dry Creek and WTF.
- 2. <u>New Targets District Scale</u>: Generate drill targets on the top 2-5 regional prospects:
  - a. Orientation ground geophysics on Dry Creek and WTF,
    - EM, gravity, CSAMT, IP, magnetics,
  - b. Prioritise top 30 conductivity targets,
  - c. Mapping and surface soil geochemistry on top 5 prospects,
  - d. New ground geophysics surveys on top 2-5 prospects,
  - e. Drill test best new targets: 5-10 holes.



For further information:-

refer to ASX Announcement by WRM on 18<sup>th</sup> December 2017:-"WRM - Exploration Program Planned – Red Mountain Zinc Project"



### **Red Mountain - Local terrain**

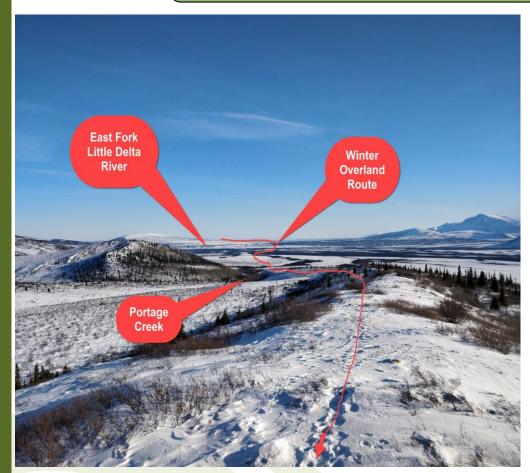


Figure above:- Route looking east towards Delta Junction

Figure below:- Route looking west towards Red Mountain and the camp site.

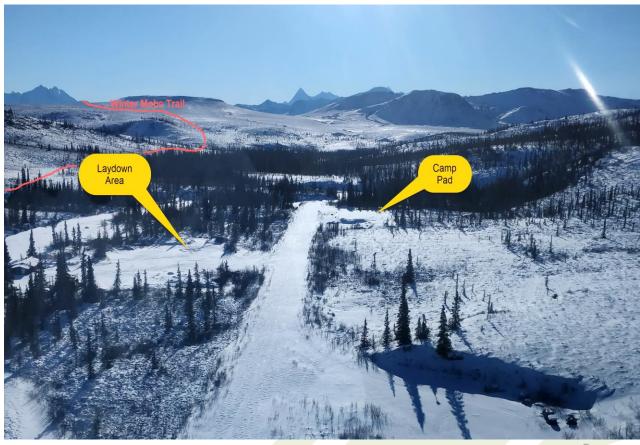


# Red Mountain – Drilling will happen!

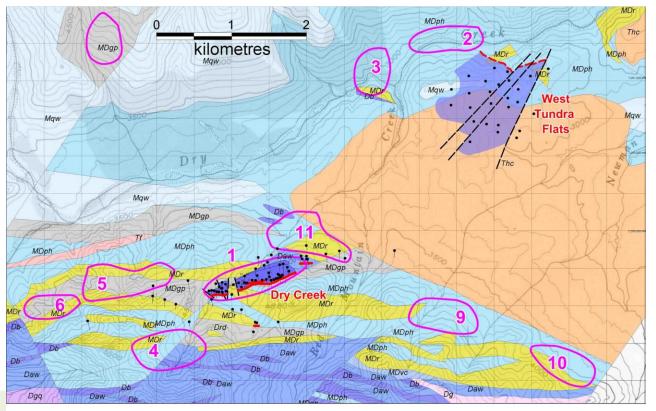


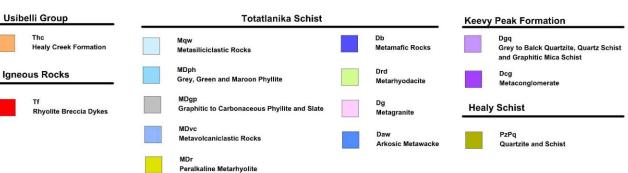
**Figure 1:** Mobilisation of the diamond drill rig and camp accommodation, following a man-made fire break through the forested section of the Fort Greely Training grounds.

**Figure 2 below:** Newman Creek airstrip and camp location (with the Red Mountain Project to the west (right)).



### **RED MOUNTAIN PROPOSED EXPLORATION PROGRAM FOR 2018**





Location of the Dry Creek and West Tundra Flats VMS deposits (purple shape of mineralisation projected to surface) with drill hole traces and priority EM conductors on DGGS geology map (after Freeman et al., 2016).

Note the lack of drilling that tests the priority conductivity anomalies numbered 2 through 11.

Anomaly 1 is coincident with mineralisation at the Dry Creek deposit.



# Mount Carrington, New South Wales

- Gold and Silver near-term production asset.
- JORC Resource of 341,000 ozs gold and 23.2 million ounces of silver.
- Pre-Feasibility Study for the Gold First Stage done<sup>1</sup>.
- Maiden JORC Reserve of 159,000 ozs gold.







# Mt Carrington Site Layout

Key Infrastructure in place to support future mining.

### Valued at ~A\$20M1

Reduces development risk, timeframe and capital cost.

- ✓ Granted Mining Leases
- √ 1.5Mt Tailings Dam
- √ 750ML Freshwater Dam
- ✓ Site Office
- ✓ RO Water treatment plant
- ✓ Access to State grid power





1 Refer ASX Announcement of 16 September 2014 "Mt Carrington Gold Project Positive Scoping Study"



# Feasibility Study and Permitting commenced

### PRE-FEASIBILTY STUDY (PFS) - GOLD FIRST STAGE<sup>1</sup>

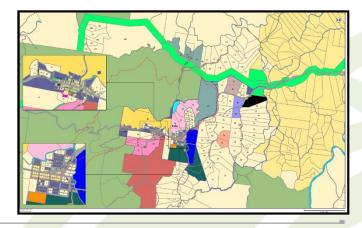
- ✓ Maiden Ore Reserve declared: 159,000 ounces gold,
- ✓ A production rate of 1,000,000 tpa,
- Gold production of 35,000 ounces per annum, and
- Total gold produced of 148,000 oz gold over this initial 4 ½ year Gold First Stage.



#### **ENVIRONMENTAL IMPACT STATEMENT (EIS)**

- ✓ Environmental Impact Assessment Baseline Studies occurring:-
  - Terrestrial ecology
  - Ground water study
  - Haulage study
  - Materials characterisation
  - Air and water quality monitoring ongoing
- ✓ Community Consultation and Social Impact Assessment strategy being developed





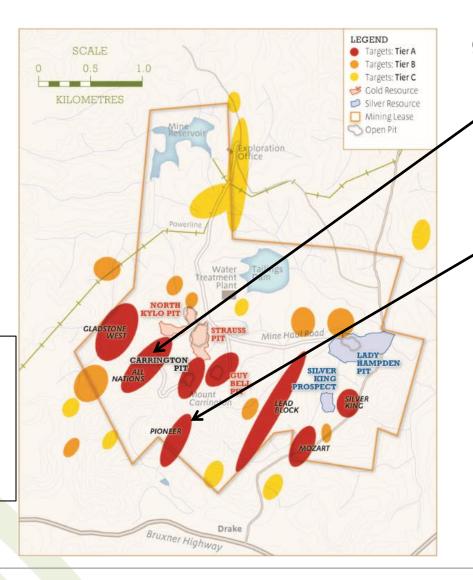
### Central Lease exploration potential for more resources

Potential to add more gold resources = a longer mine life



Silver resources in the Indicated category:-

✓ 3.5Mt @ 73g/t Ag for 8.2M ounces



Multiple historic drill holes with shallow gold mineralisation yet to be followed-up.

#### All Nations Zone – 2 targets

All Nations West - 400m strike potential not drilled

- ✓ 0.85m @ 18.2g/t Au from 76.5m (ANDD003)\*
- ✓ 0.4m @ 17.2g/t Au from 96.6m (ANDD003)\*

Four other zones (Kylo South, Pioneer, Carrington and Guy Bell) also with drill hole intersections yet to be followed up.

Significant copper potential remains to be tested beneath shallow mineralisation at Gladstone West.

<sup>\*</sup> Refer to ASX Announcement by Rex Minerals Ltd 28 September 2009



# **Investment Case Summary**

Exposure to a globally significant zinc project	<ul> <li>Red Mountain Project, Alaska</li> <li>High grade, large resource - top quartile for global VMS projects</li> <li>Established and supportive mining jurisdiction</li> </ul>						
Exciting exploration upside	<ul> <li>The two known deposits remain open downdip and in some portions along strike, offering resource increase potential</li> <li>High-grade zinc and silver VMS potential from identified targets surrounding the known Red Mountain deposits</li> </ul>						
Value growth and near term news flow	Potential for WRM to substantially rerate when compared to both the company's zinc and gold peer groups Ongoing news flow from exploration and drilling campaigns at Red Mountain and a near-term production development project at Mt Carrington						
Jurisdictional diversification	Projects in Alaska and NSW, both low risk investment destinations						
Highly credentialed board and management team	Track record of delivering projects						
Mt Carrington gold / silver development	<ul> <li>Development project with an advanced DFS and a maiden Reserve</li> <li>Reduced timeline to gold and silver production</li> <li>brownfields development and reduced capex requirement with infrastructure to support mining in place</li> <li>option on project financing in place</li> </ul>						

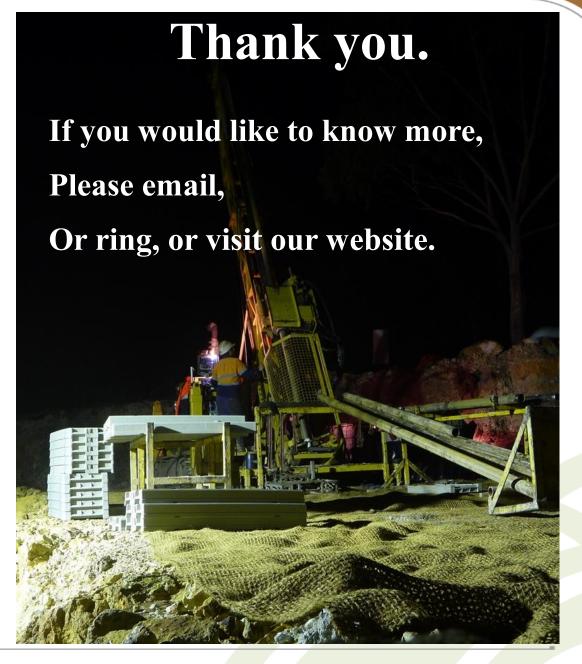


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Email: info@whiterockminerals.com.au

Website: www.whiterockminerals.com.au



# **Appendices**

- Red Mountain Back-up Information
- Mt Carrington Back-up Information



### Management

Rohan Worland
Exploration Manager
BSc (Hons), Grad. Dip (F&I)
MAIG



#### Geologist

23 years exploration experience in Australia, Africa, North America, South America and New Zealand, including 14 years with Normandy and Newmont.

Shane Turner Company Secretary & CFO CA, B. Bus



#### **Chartered Accountant**

29 years experience in Business Advisory, Initial Public Offerings, ongoing compliance and Corporate Governance.

Non-exec director, company secretary and CFO of MRG Metals Ltd.



# Red Mountain, Alaska

**Advanced Exploration Project** 



### 3. RED MOUNTAIN WORK LOCATION

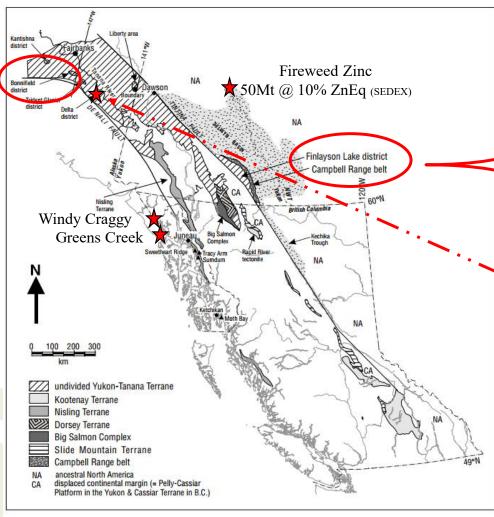


Figure 2. Distribution of the Yukon-Tanana Terrane, Kootenay, Nisling, Dorsey, and Slide Mountain terranes, Big Salmon Complex and Campbell Range belt. Also shown are the locations of Selwyn Basin, Cassiar terrane (CA) and Ancestral North America (NA). Modified from a figure by Joanne Nelson (written communication, 1997).

#### YUKON-TANANA TERRANE

#### Known VMS belt:-

KZK

19Mt @ 6.3% Zn, 1.9% Pb, 0.9% Cu, 148 g/t Ag, 1.4 g/t Au

Wolverine

6.2Mt @ 12.6% Zn, 1.5% Pb, 1.3% Cu, 370.9 g/t Ag, 1.7 g/t Au

• **GP4F** 

1.5Mt @ 6.4% Zn, 3.1% Pb, 0.1% Cu, 89.7 g/t Ag, 2.0 g/t Au

• Delta (closest – 150km)

15.4Mt @ 3.8% Zn, 1.6% Pb, 0.6% Cu, 62 g/t Ag, 1.7 g/t Au

### Red Mountain:-

16.7 Mt @ 4.1% Zn, 1.7% Pb, 0.2% Cu, 99 g/t Ag, 0.7 g/t Au

Including a high grade component:-

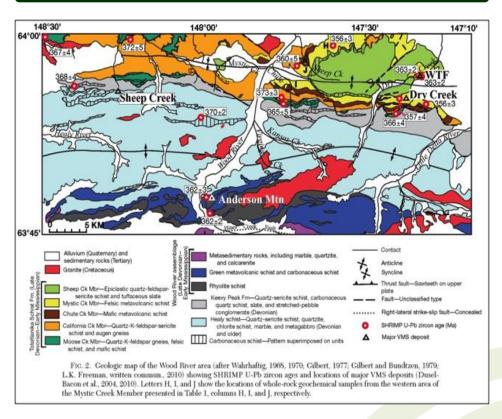
9.1 Mt @ 5.8% Zn, 2.6% Pb, 0.1% Cu, 157 g/t Ag, 0.9 g/t Au



# Red Mountain Geology and Mineralisation

- World class deposits with similar siliciclastic felsic associations to the Bonnifield district include:-
  - Rio Tinto (Cu-Zn-Pb-Au-Ag; Spain),
  - Brunswick 12 (Zn-Pb-Ag; Canada) and
  - Eskay Creek (Au-Ag-Zn-Pb; Canada).
- Analysis of worldwide VMS deposits of this type indicate promising exploration potential for Red Mountain:-
  - The deposits nearly always occur in clusters
  - The presence and spatial relationships of the two separate deposits at Red Mountain may prove to be a significant exploration vector for discovery of further deposits.

#### Red Mountain - Regional Geology



White Rock Minerals has engaged world-renowned VMS expert, Dr. Jim Franklin, to assist with assessing the prospectivity of the district and targeting additional mineralisation.

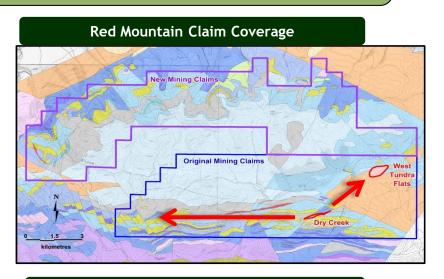


White Rock Minerals Ltd April 2018 ASX:WRM

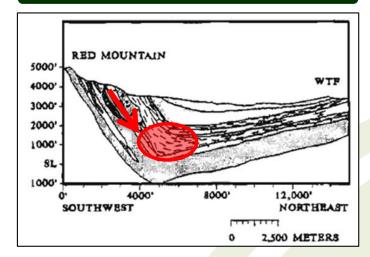
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# **Exploration Upside**

- Historic data has been compiled in 3D and integrated with more recent airborne EM & magnetics flown by the Alaskan Geological Survey in 2007 to define a suite of high priority targets.
- Blue sky upside for significant new discoveries exist:
  - Immediately along strike east and west
  - Down dip as additional high grade lenses
  - The syncline between Red Mountain and WTF presents the obvious large tonnage target with potential for structural upgrade in the hinge.
- Analysis of the Red Mountain and WTF deposits in the context of similar VMS districts worldwide indicate:
  - ✓ VMS deposits typically occur in clusters ("VMS camps") at regular spacing. Deposit sizes within camps follow a log normal distribution. Modern exploration has not been applied.
  - ✓ The massive sulphides occur as stacked lenses, with additional potential in the hangingwall and footwall that remains untested
  - ✓ There is potential for a significantly enriched gold zone in the hangingwall
    of the deposit which may have been missed by previous explorers
  - ✓ Historic drilling shows increasing grade with depth that remains untested.



#### Red Mountain - WTF Schematic Cross Section

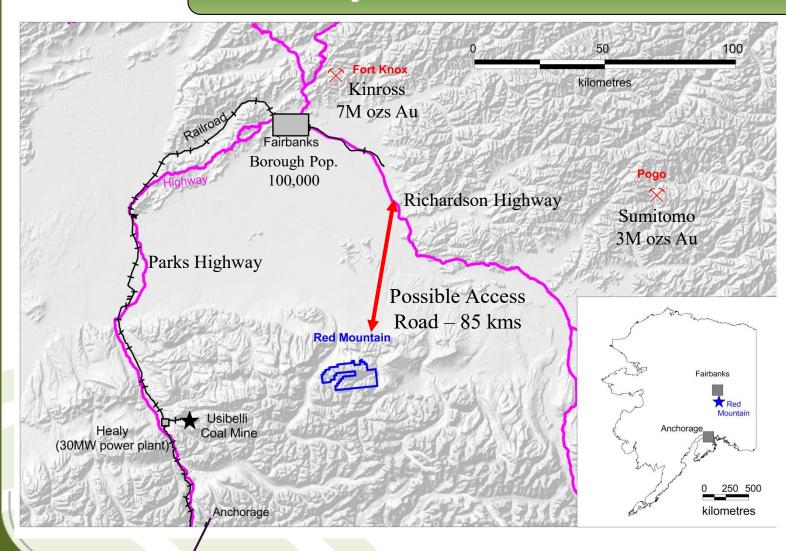




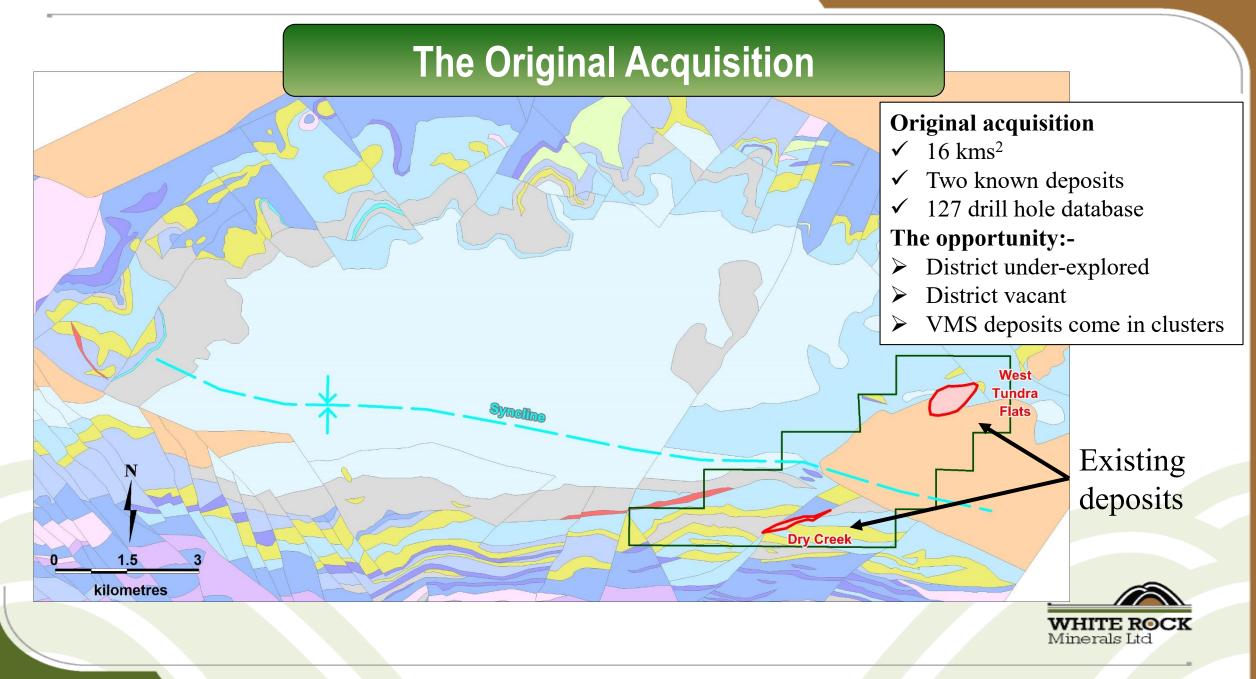
White Rock Minerals Ltd ASX:WRM

April 2018

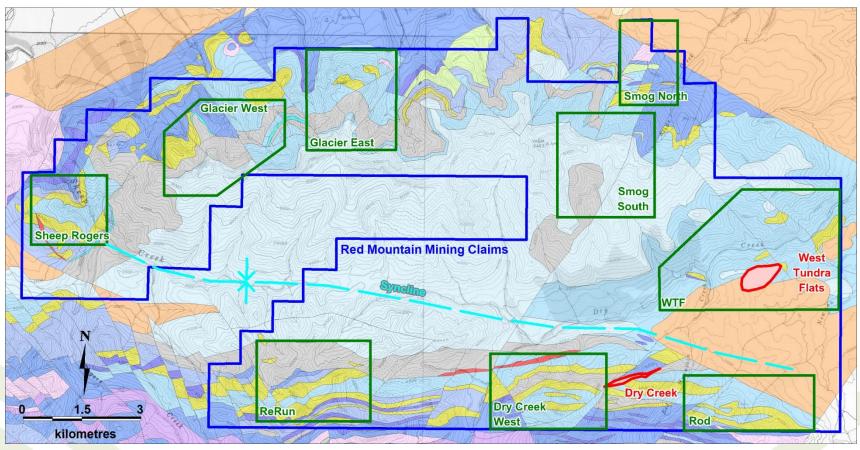
### Project Overview- Red Mountain Alaska



- ✓ Alaska ranked 10<sup>th</sup> out of 93 jurisdictions by the Fraser Institute (up 4 places from 2016).
- Red Mountain Project central Alaska location.
- Well located with respect to infrastructure and logistics:-
  - ➤ Major road and rail access located 80km west, and 85km north,
  - ➤ Connection to the port of Anchorage 400km south,
  - > Access to fresh water,
  - ➤ No community or environmental legacy issues,
  - ➤ Established mining hub at Fairbanks; services mines including Pogo, Fort Knox and Usibelli.



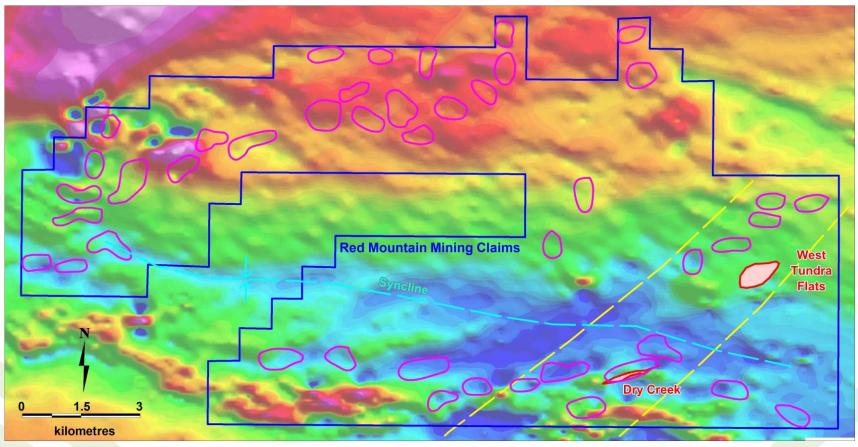
# Regional Geochemical Targets



Geochemical target areas defined by modern vector analysis completed by Dr Jim Franklin. Each target area shows alteration that indicates proximal VMS mineralisation.



# **Regional Conductors**



Conductivity anomalies (shown over the magnetics image) analogous to the Dry Creek and WTF deposits have been defined by Condor Geophysics using the State of Alaska DIGHEM survey from 2007.



# **Historic Drilling**

Drilling at Discovery and Fosters Zones ceased in 1999

Drilling at West Tundra Flats ceased in 1983

Multiple shallow intercepts indicate potential for stacked high-grade lodes

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Pb %	Cu %	Ag g/t	Au g/t
DC76-02	38.6	50.3	11.6	5.29	2.16	0.22	112	NA
DC97-01	41.1	52.4	11.3	7.60	3.18	0.26	115	0.99
including	41.1	42.8	1.7	20.01	8.52	0.62	266	1.47
DC97-04	62.5	75.0	12.5	12.51	5.52	0.71	160	1.14
including	69.5	75.0	5.5	25.89	11.72	0.88	346	2.46
DC97-14	57.0	75.3	18.3	1.39	0.23	2.08	15	0.24
including	59.1	63.4	4.3	0.06	0.04	6.75	15	0.04
DC97-30	17.7	20.9	3.2	9.19	4.72	0.41	226	1.16
DC97-31	29.0	31.4	2.4	12.72	6.45	0.35	1,061	3.82
DC97-32	27.9	33.9	6.1	14.43	6.83	0.36	137	0.61
including	30.3	33.4	3.1	20.08	9.52	0.52	169	0.78
DC97-33	39.1	46.2	7.1	15.12	6.81	0.30	334	0.86
DC98-38	59.0	68.0	9.0	5.40	2.43	0.15	269	1.00
including	61.5	63.8	2.3	13.24	5.82	0.30	581	3.07
DC98-39	77.6	98.8	21.2	6.99	3.20	0.19	57	0.38
including	77.6	89.0	11.4	10.38	4.78	0.28	56	0.51
with	77.6	82.6	5.0	17.74	7.80	0.45	64	0.45
DC98-40	6.1	42.2	36.1	6.24	2.56	0.22	183	1.03
Including	6.1	<del>-10.7</del>	4.6	23.54	8.45	1.02	531	1.53
including	21.3	24.5	3.1	14.65	6.65	0.25	211	0.53
DC98-60	17.6	86.5	68.9	4.02	1.88	0.10	58	0.36
including	53.8	58.8	4.9	10.17	4.96	0.28	86	0.39
WTF82-05	104.3	106.1	1.7	11.40	5.97	0.15	374	1.71
WTF82-08	160.9	164.0	3.0	7.28	4.27	0.17	796	1.12
WTF83-17	58.6	59.9	1.3	20.92	9.17	0.56	796	10.22
Refer to WRM release to the ASX of 15 February 2016								

Gold and silver intercepts indicate significant co-product potential



Refer to WRM release to the ASX of 15 February 2016

## Red Mountain Resource

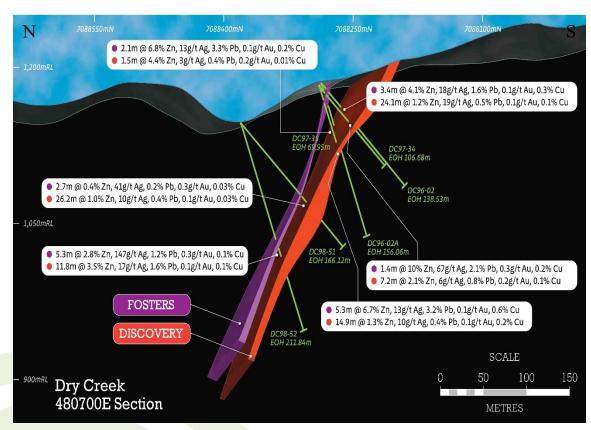
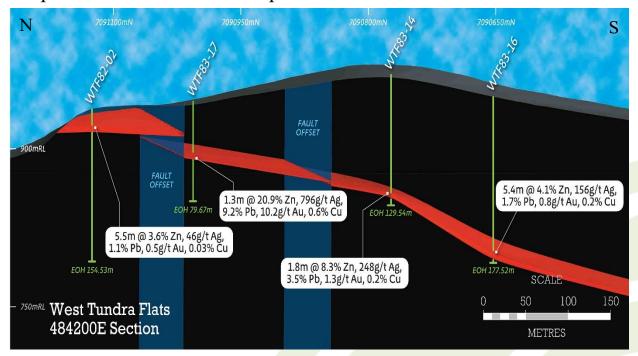


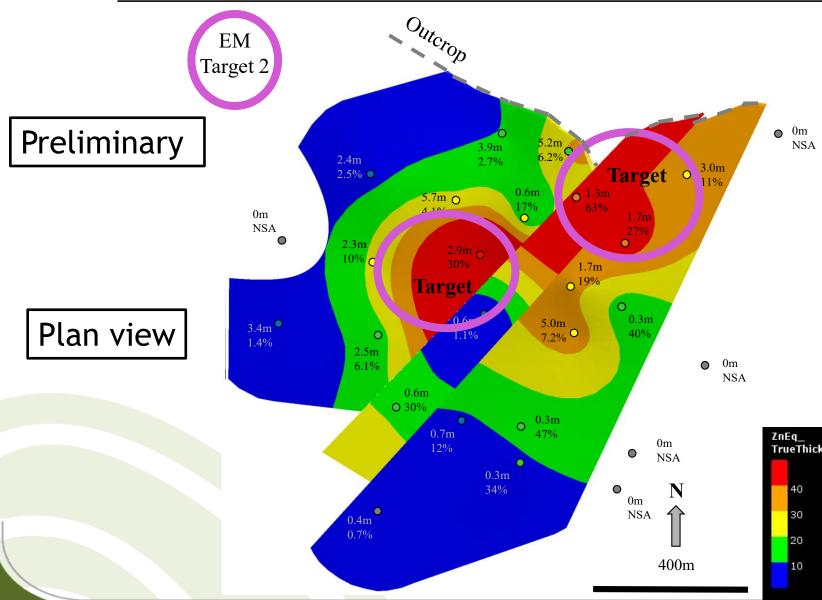
Figure above: Cross-section 480,700E looking towards the east through the **Dry Creek deposit** showing the geometry of the Fosters and Discovery mineralised massive sulphide lenses and drill intercepts.

High grade, multiple lenses, mineralisation at surface, open at depth.

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



#### **RED MOUNTAIN PROPOSED EXPLORATION PROGRAM FOR 2018**



## **Drilling at WTF**

- 1. Validate historic drilling e.g. WTF82-08\*
  - 2.9m @ 30% ZnEq (7.3% Zn, 4.3% Pb, 0.2% Cu, 796g/t Ag & 1.1g/t Au).
- 2. Target high grade.
- 3. Test along strike EM target 2.

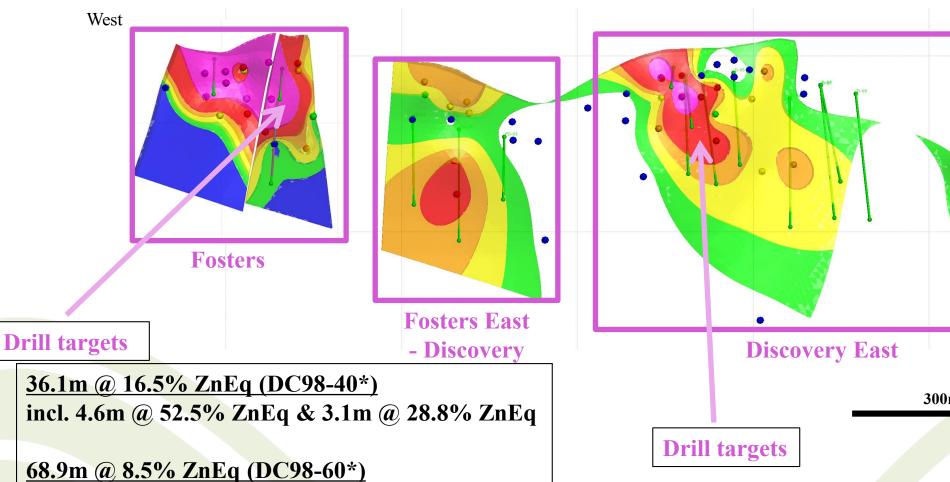
\* Refer to WRM release to the ASX of 15 February 2016



#### **RED MOUNTAIN PROPOSED EXPLORATION PROGRAM FOR 2018**

## <u>Drilling at Dry Creek – Fosters lens long section</u>

## **Preliminary**



East 300m

WHITE ROCK Minerals Ltd

\* Refer to WRM release to the ASX of 15 February 2016

incl. 4.9m @ 18.9% ZnEq

### **RED MOUNTAIN PROPOSED EXPLORATION PROGRAM FOR 2018**

## Example

## **Orientation ground geophysics**

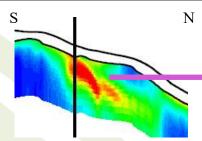
• to select the best technique for the regional Red Mountain exploration program.

• EM, gravity, CSAMT, IP, magnetics.

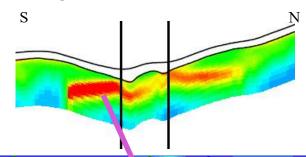
## **New Targets**

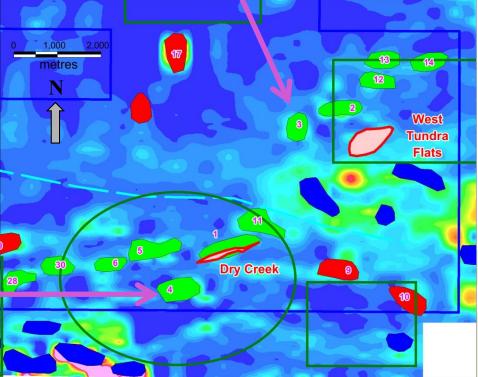
Ground geophysics on top 5-6 targets

<u>Target 4 – conductor southwest of Dry Creek</u>



<u>Target 3 – conductor west of WTF</u>

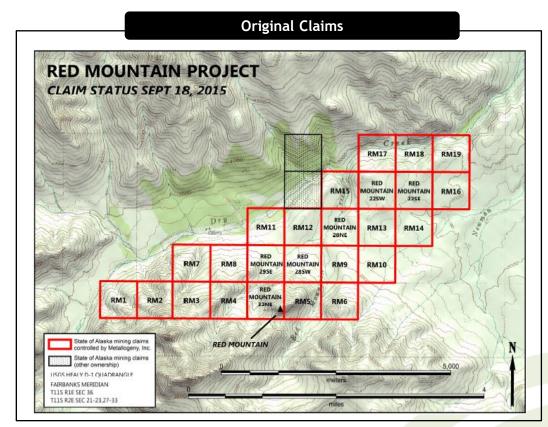






# **Agreement with Metallogeny**

- The key terms of the Red Mountain Project at acquisition in 2016 were as follows:
  - US\$1.225m expenditure commitment over 4 years;
  - US\$1.0m in cash payments over 5 years;
  - Share payments: 1 million shares;
  - Metallogeny retain a right to 10% of the proceeds on any sale of the claims prior to commercial production.
  - 2% NSR with the option to sell 1% (i.e. 50% of NSR) for US\$2m.





# Mt Carrington, New South Wales

**Advanced Development Project** 



#### **Mount Carrington Resource Statement**

MT CARRINGTON MINERAL RESOURCES							
Gold Dominant							
<b>Resource Category</b>	Deposit	Tonnes	Gold grade (g/t)	Gold ounces	Silver grade (g/t)	Silver ounces	
Indicated	Strauss	2,070,000	1.5	103,000	1.7	115,000	
	Kylo	2,010,000	1.3	85,000	1.4	92,000	
	Sub-Total	4,080,000	1.4	188,000	1.6	207,000	
Inferred	Strauss	380,000	1.7	21,000	2.4	30,000	
	Kylo	30,000	1.0	1,000	2.1	2,000	
	Sub-Total	410,000	1.7	22,000	2.4	32,000	

Stage One Gold First of the Mt Carrington Mine Plan will focus on the Strauss and Kylo deposits.

MT CARRINGTON MINERAL RESOURCES								
Gold Dominant								
<b>Resource Category</b>	Deposit	Tonnes	Gold grade (g/t)	<b>Gold ounces</b>	Silver grade (g/t)	Silver ounces		
	Red Rock	1,630,000	1.0	54,000	3.5	182,000		
Inferred	Guy Bell	160,000	2.5	13,000	4.9	24,000		
	Sub-Total	1,790,000	1.2	67,000	3.6	206,000		
Silver Dominant								
<b>Resource Category</b>	Deposit	Tonnes	Gold grade (g/t)	<b>Gold ounces</b>	Silver grade (g/t)	Silver ounces		
Indicated	Lady Hampden	1,840,000	0.6	37,000	69	4,056,000		
	White Rock	1,710,000			77	4,214,000		
	Sub-Total	3,540,000	0.3	37,000	73	8,270,000		
Inferred	Lady Hampden	2,470,000	0.3	27,000	51	4,023,000		
	White Rock	2,660,000			47	3,978,000		
	White Rock North	3,180,000			52	5,314,000		
	Silver King	640,000			59	1,218,000		
	Sub-Total	8,950,000	0.1	27,000	51	14,533,000		
MT CARRINGTON COMBINED MINERAL RESOURCES								
Category	Tonnes		Gold ounces		Silver ounces			
Indicated	7,620,00	00	225,000		8,477,000			
Inferred	11,150,00	00	116,000		14,770,000			
Total	18,770,000		341,000		23,247,000			

Stage Two Silver of the Mt Carrington Mine Plan will focus on the Lady Hampden and White Rock deposits.



# Mine Plan Stage One – Gold First

#### Stage One First Two Gold Resources to be mined

#### Strauss and Kylo deposits

- Indicated Category<sup>1</sup>
- 188,000oz Au (4 million tonnes @ 1.4g/t gold).
- ✓ The Stage One Pre-feasibility study (PFS) confirms Mt. Carrington as a viable gold first project (Gold First) with significant potential upside in subsequent silver production and future gold and silver exploration.
- ✓ The PFS findings indicate a technically sound and financially viable project generating in excess of **A\$36 million undiscounted** cashflow over the initial 4 ½ year Gold First mine plan, with a strong Internal Rate of Return (IRR) of 34%.²

1 Refer ASX Announcement 9 October 2017 – "Improved Gold Resources at Mt Carrington Gold-Silver Project"

2 Refer ASX Announcement 27 December 2017 – "Mt Carrington Gold-Silver Project Pre-Feasibility Study Stage 1"

	Gold First PFS <sup>2</sup>
Project Life (years) - Gold First Stage	4.3
Strip Ratio (waste:ore) including pre-strip	2.67
Strip Ratio (waste:ore) excluding pre-strip	2.42
Gold recovered (koz)	147,300
Annual Gold production (average koz)	36,800
Grind size p80 (um)	75
Metallurgical recovery (%)	82.8
Ore Reserve (Mt ore)	3.47
Ore Reserve Gold Grade (g/t)	1.43
Ore Reserve (koz Gold)	159,000
Mineral Resource (Mt)*	4.5
Mineral Resource Gold Grade (g/t)*	1.5
Mineral Resource (koz Gold)*	210,000
Mineral Resource (koz Silver)*	238,000

<sup>\*</sup> Refer Section 5 below and ASX Announcement 9 October 2017

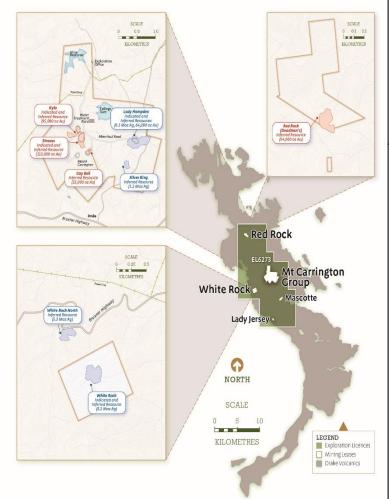
Initial Capital Cost (A\$M)**	35.7
Mining Cost (A\$/t ore)***	18.33
Processing Cost (A\$/t ore milled)	21.84
Total Site Operating Cost (A\$/t ore milled)****	46.23
C1 Cash Cost (A\$/oz produced)	1,078
All In Sustaining Cost (AISC) (A\$/oz produced)	1,236
Free Cash Flow generated (A\$M)	36.7
IRR (%)	34.0

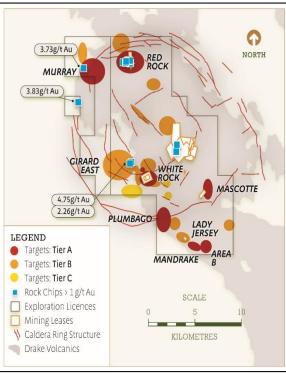
<sup>\*\*</sup> This includes contingency.

<sup>\*\*\*</sup> Mining cost is an average of \$5.19/t of material mined over the life of mine.

<sup>\*\*\*\*</sup> Includes G&A and Royalty payments.

# Mt Carrington – Regional Exploration upside





Over 180km<sup>2</sup> of tenements, highly prospective for epithermal and intrusion-related gold, silver and copper mineralisation

#### **Priority Near-Mine Targets**

- 1. Mining Leases: Potential Resource Additions
  - Multiple shallow targets
  - Historic drill intercepts for follow-up
  - High grade underground potential poorly tested
- 2. Exploration Licences: Silver-Gold-Copper Targets
  - Pipeline of prospects
  - Drill ready targets based on:
    - Mapping
    - Geochemcial anomalies
    - Geophysical IP/resistivity anomalies
- 3. Porphyry Potential: Zoned Copper-Gold-Silver
  - Robust intrusion related copper model at Mt Carrington
  - Strong secondary copper in shallow drilling
  - Large open geophysical IP anomalies with confirmed alteration source
  - Under-drilled
  - Similar zoned Copper-Gold-Silver systems recognised at White Rock and Red Rock

# **Proposed Funding for Construction**

# Long-term Strategic Partner New-York based Cartesian Royalty Holdings ("CRH")

- ✓ Gold streaming financing Term Sheet\* contemplated to move the Mt Carrington project directly into construction, commissioning and commercial production, subject to a successful Definitive Feasibility Study (DFS) and the necessary approvals.
- ➤ Phase 1:- Equity investment of A\$1,000,000 in two equal tranches\*\* to fund working capital and to contribute funding to progress its DFS and Environmental Impact Statement (EIS) activities); and
- ➤ Phase 2:- a future streaming financing of US\$19 million over a 12 month period, in return for a share of gold and silver production to fund working capital and construction and commissioning of the Mt Carrington Project.
- ✓ Supporting White Rock to achieve its strategic goal of becoming a successful gold and silver producer.

<sup>\*</sup> Binding and Conditional: The Transactions contemplated by the Term Sheet are subject to various conditions including the completion of due diligence to the satisfaction of CRH, certain White Rock shareholder approvals, and the entry into definitive documentation for Phase 2 (streaming financing), as set out in more detail in the ASX announcement of 27 June 2016.



<sup>\*\*</sup> Tranches One and Two completed

# **Equity Placement Facility**

## <u>Fully discretionary</u> Equity Placement Facility with the Kentgrove Capital Growth Fund<sup>1</sup>.

- ✓ Equity Placement Facility for up to \$7.2 million available to be used over 36 months.
- ✓ White Rock <u>may</u> seek multiple placements under the Facility, up to the maturity date (11 December 2020). For each placement, <u>White Rock determines when</u> the placement occurs, the placement <u>period</u>, the maximum <u>amount</u> of the placement (up to \$200,000 or a higher amount by mutual agreement), and the minimum issue <u>price</u>.
- ✓ For each placement, White Rock will receive funds from Kentgrove Capital via the issue of shares at a 5% discount to a volume weighted average price (VWAP) over the period of the placement, which cannot be less than the minimum issue price determined by White Rock.
- ✓ The provision of funding by Kentgrove Capital under the Facility is subject to a number of conditions, including there being sufficient liquidity in the market for the White Rock shares during the applicable placement period, as well as other conditions customarily included in facilities of this nature.
- ✓ Either party may terminate the Agreement by giving 14 days notice in accordance with the termination provisions contained in the Agreement with no termination fee.



# **Indicative Activity Timeline**

