





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



Drilling at Mt Carrington



Mt Carrington gold deposits



Red Mountain Zinc & Silver & Gold

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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 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 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.

# **A Brief Summary**

- 1) Company profile
- 2) Commodity profile
- 3) Our two projects
  - a) Location
  - b) Stage of development
- 4) Management
- 5) Value proposition



## White Rock Minerals – who we are

#### **Capital Structure**

•	ASX Code:	WRM
•	Fully paid shares on issue	871.7M
	<ul> <li>Options unlisted</li> </ul>	181.4M

Share price range (12 months) 1c - 2c

Market Cap (@ ~1.5c/share) \$13.0M

\$Nil Debt

Cash on hand (Sept 2017) \$2.2M



•	HSBC Cus	stody Noms	14.7%
	Avalon Va	nd	0 40/

Avalon Ventures 9.1%

Citicorp Noms 8.0%

Suetone P/L 5.7%

**Top 20** 57.5%



WRM @ 1.5cps. Our two Assets valued @ 8cps



Source:- DJ Carmichael.

## Commodity profile – what we are in to

✓Zinc – in demand



✓ Silver – good upside growth potential



✓ Gold – necessary in any portfolio



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



## 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.
- Definitive Feasibility Study step commenced.
- 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

- refer cautionary statement on slide 2

# ★ Red Mountain, Alaska

- Polymetallic VMS deposits.
- JORC resources<sup>2</sup>
  - ✓ <u>Impressive base metal and precious metal</u> content with 678,000t zinc, 286,000t lead, 53.5 million ounces silver and 352,000 ounces gold.
- 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 along strike and at depth.

2 The Red Mountain project hosts JORC estimates of Inferred resources

refer cautionary statement on slide 2



# 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 component: Within the existing 16Mt @ 9% ZnEq global resource is a high-grade resource of 9.1Mt @ 12.9% ZnEq (using a 3% Zn cut-off grade).

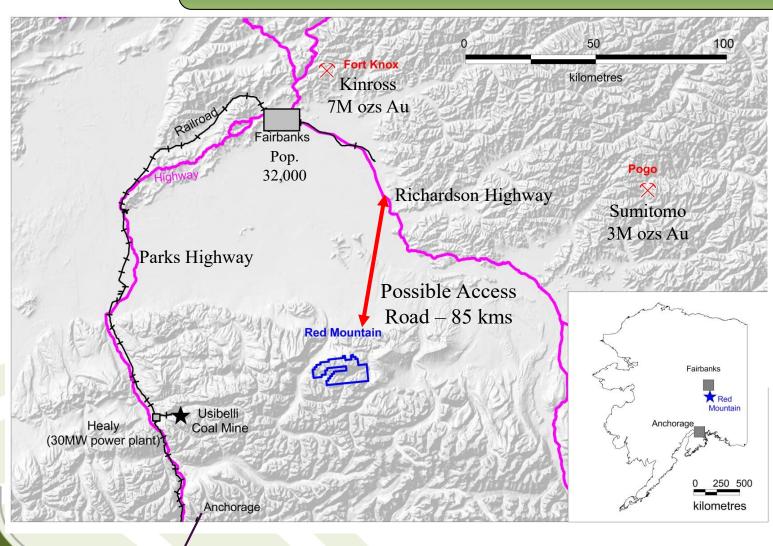
Last drilled in the 1990s

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

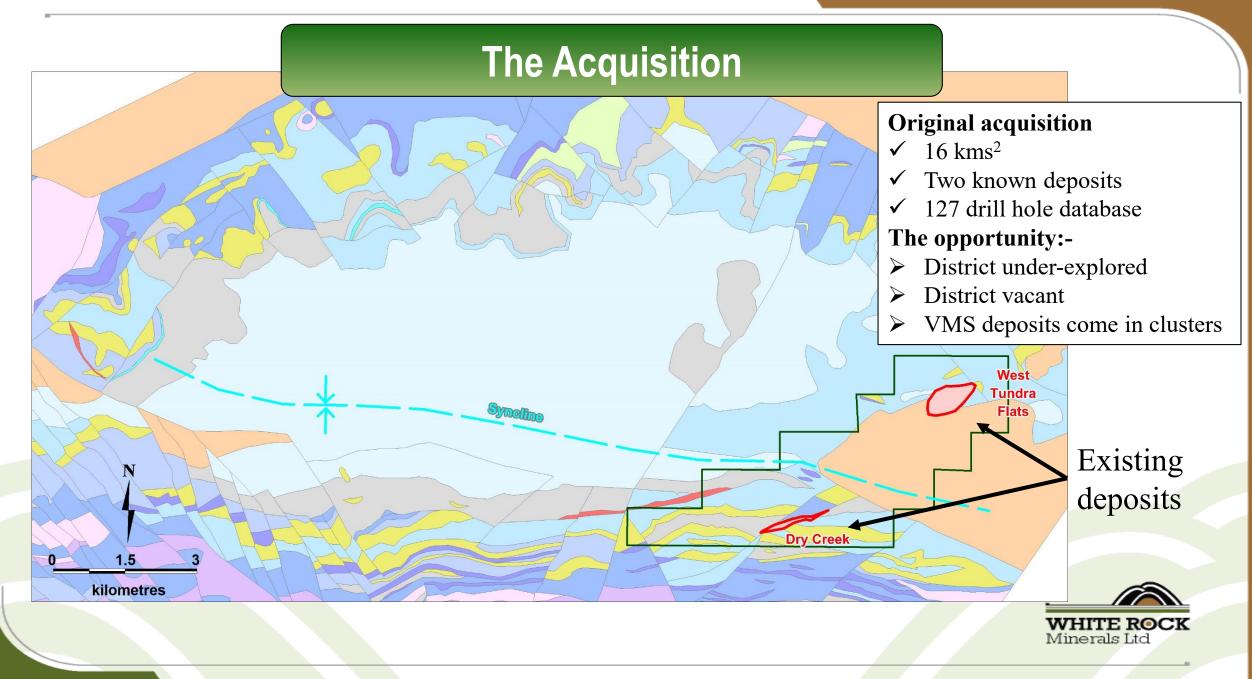


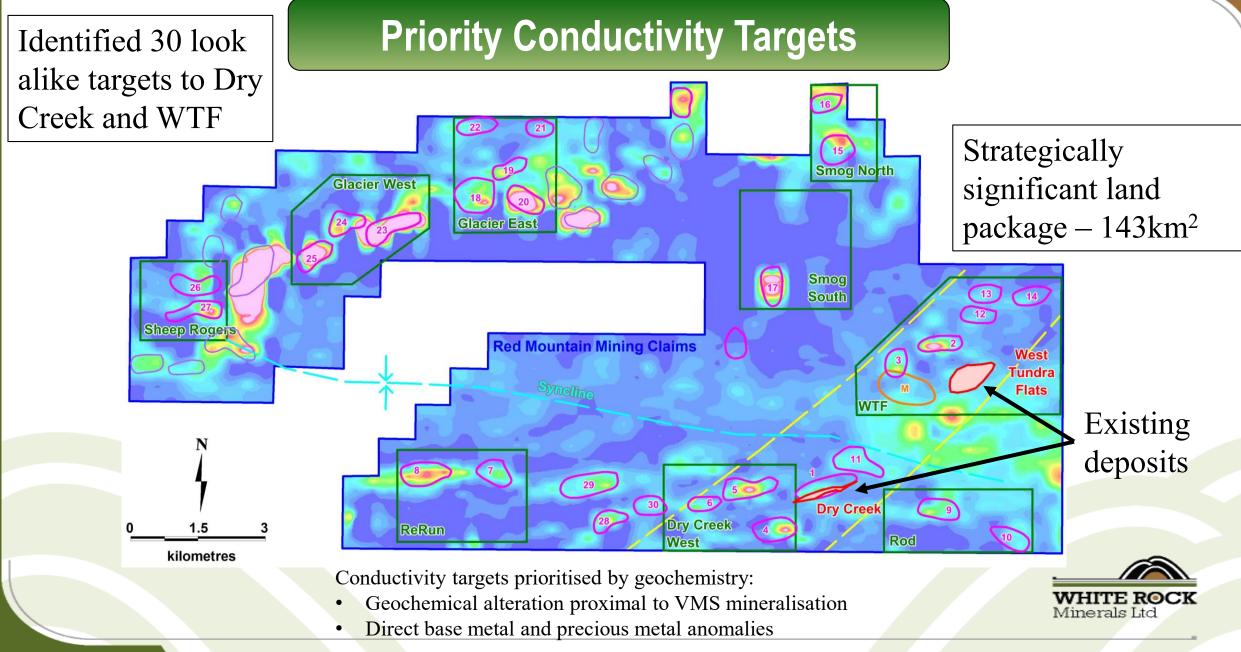
## **Project Overview- Red Mountain Alaska**



- ✓ Central Alaska location.
- Well located with respect to infrastructure and logistics:-
  - ➤ Major road and rail access located 80km west, and 85km north,
  - ➤ Connection to 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.







## Red Mountain Resource

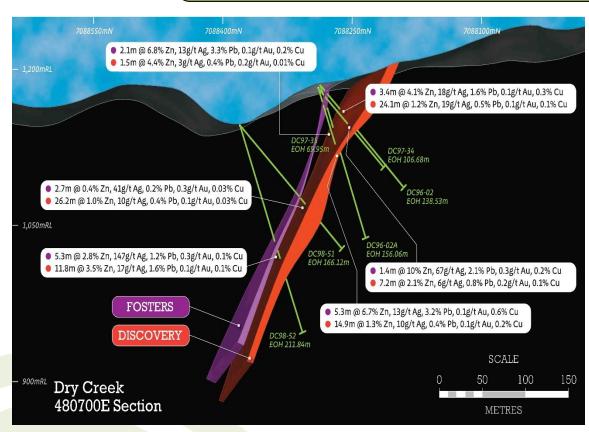
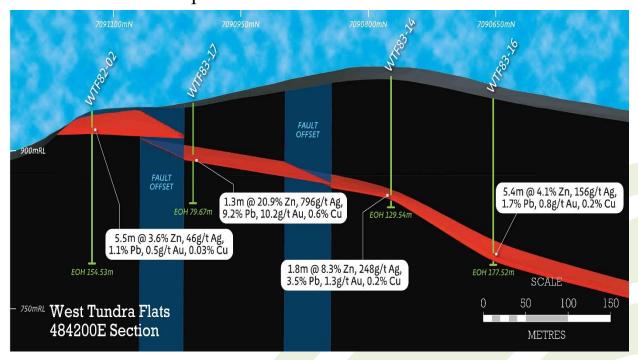


Figure above: Cross-section 480,700E looking towards the east through the Dry Creek deposit showing the geometry of the Fosters and Discovery mineralised massive sulphide lenses and drill intercepts.

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 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	<b>(678)</b>	286	53.5	26	(352)

## 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"

# Mount Carrington, New South Wales

**Gold and Silver development asset** 

**Definitive Feasibility Study (DFS) commenced** 

JORC Resource of 341,000 ozs gold and 23.2 million ounces of silver







# Mt Carrington Site Layout

Key Infrastructure in place to support future mining.

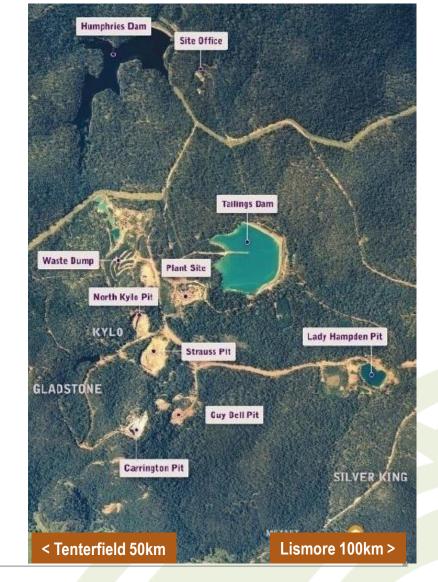
## Valued at ~A\$20M.

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



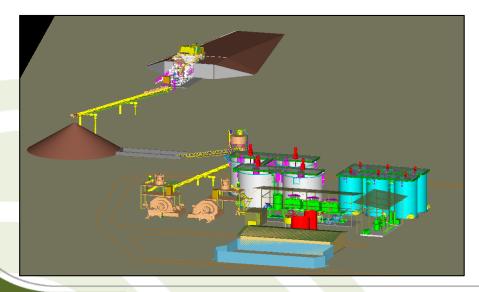




# Definitive Feasibility Study and Permitting commenced

## **DEFINITIVE FEASIBILTY STUDY (DFS)**

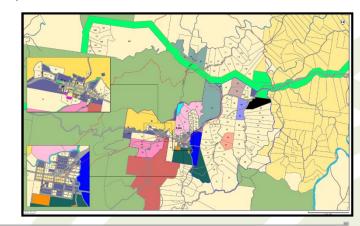
- ✓ Resource update to JORC 2012
- ✓ Geotechnical and Mine Plan pit and sequencing optimisation
- ✓ Metallurgical test work to confirm the flow sheet
- ✓ Tailings storage and water management review
- ✓ Deliver a maiden JORC Reserve



## **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





## Mine Plan Stage One – Gold Mineral Resource Upgrade

JORC Code, 2012 Edition

## Stage One First Two Gold Resources to be mined

## **Strauss and Kylo deposits**

- Indicated Category increased<sup>1</sup>
- from 116,000oz to 188,000oz Au ( 72,000oz) (62%).
- Increased tonnage to 4 million tonnes (up 44%)
- Improved grade to 1.4g/t (up 10%).

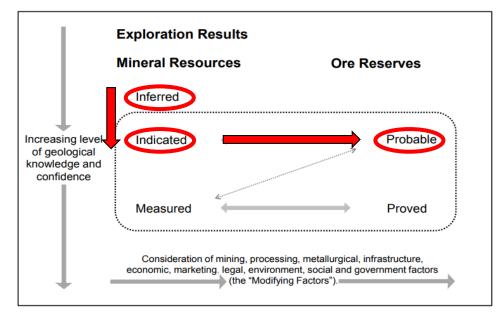


Figure 1 General relationship between Exploration Results, Mineral Resources and Ore Reserves.

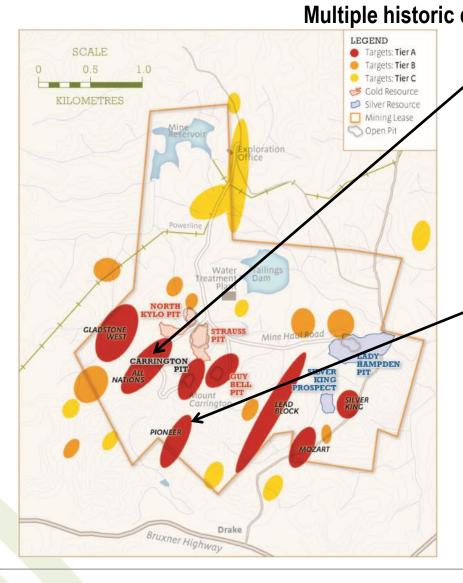
- ✓ Increased confidence at Strauss & Kylo
- ✓ Solid basis for proceeding with PFS to deliver a maiden Reserve

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

MT CARRINGTON MINERAL RESOURCES								
		Go	old Dominant					
<b>Resource Category</b>	Deposit	Tonnes	Gold grade (g/t)	<b>Gold ounces</b>	Silver grade (g/t)	Silver ounces		
	Strauss	2,070,000	1.5	103,000	1.7	115,000		
Indicated	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		
	Strauss	380,000	1.7	21,000	2.4	30,000		
Inferred	Kylo	30,000	1.0	1,000	2.1	2,000		
	Sub-Total	410,000	1.7	22,000	2.4	32,000		

## Central Lease exploration potential for more Gold resources

Potential to add more gold resources = a longer mine life



Multiple historic drill holes with shallow gold mineralisation vet 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)

#### Kylo South – 100m of strike potential

- ✓ 1m @ 12.8g/t Au from 36m (MCP399)
- ✓ 2m @ 5.9g/t Au from surface (MCP036)
- ✓ 2m @ 7.9g/t Au from 42m (MCP 426)

#### <u>Pioneer – 2 targets</u>

Golden Knob – top of gold zone intersected, no drilling down dip

✓ 1m @ 9.6g/t Au from 58m (MCP403)

#### Perseverance – 400m strike potential not drilled

✓ 2m @ 9.7g/t Au from 72m (RC91DK003)

Two other zones (Carrington and Guy Bell) also with drill hole intersections yet to be followed up

## Mine Plan Stage Two – Silver Mineral Resource

Stage Two of the Scoping Study contemplates mining the silver dominant resources

#### Lady Hampden and White Rock deposits

- ✓ To be mined once the gold resources have been completed (Year 4 on).
- ✓ Allows time for further mineralogy studies, test work and flow sheet design to be progressed.
- ✓ Allows time for further and detailed concentrate sale terms to be negotiated with traders and smelters.

✓ Any processing plant modifications to treat the silver ores can be funded out of the positive cash flows.

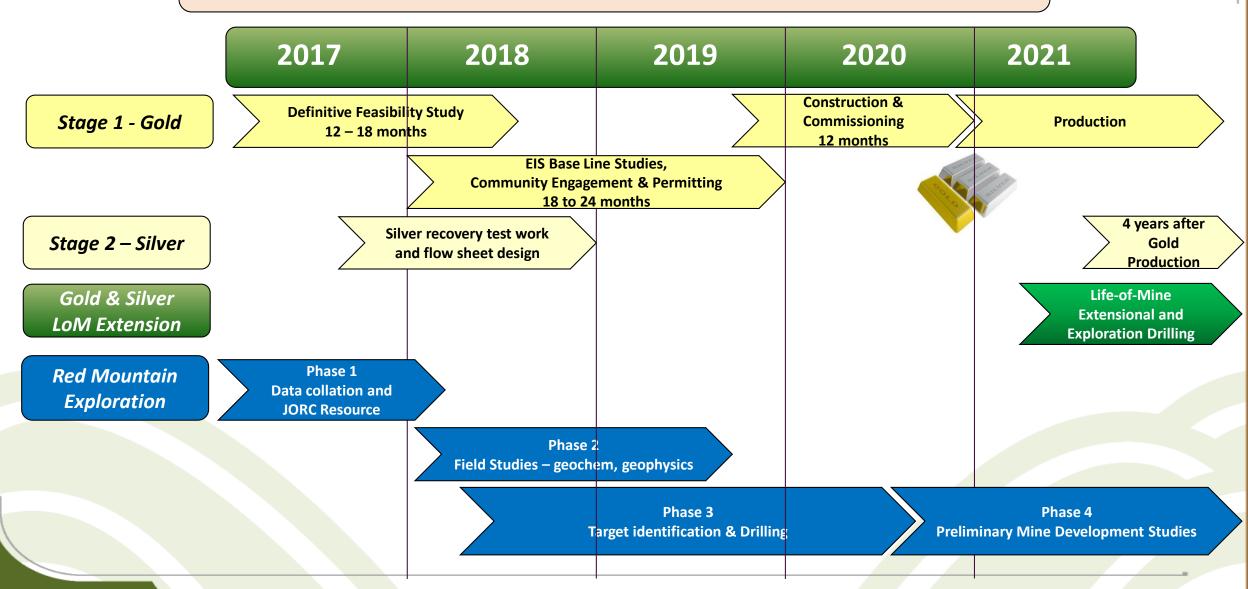
being generated by the gold Stage One.

Silver resources in the
Indicated category:-
( 0 E) F: 0 E0 /: A

✓ 3.5Mt @ 73g/t Ag for 8.2M ounces

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		
	Lady Hampden	2,470,000	0.3	27,000	51	4,023,000		
Inferred	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		

## **Indicative Activity Timeline**



# 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
Chairman Kidman Resources (Au & Li)
Non-Exec Director of Nord Gold NV (Au), Millennium Minerals Ltd (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



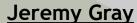
MD & CEO
B.Eng (Hons, Mining), M.Eng.Sc, FAusIMM, GAICD



#### 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 Mantle Mining Corp (Au)



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



#### **Corporate Finance**

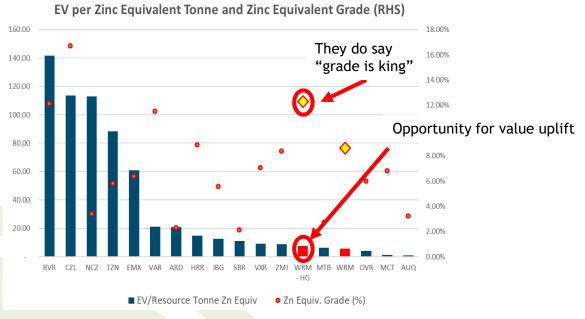
23 years in mining investment including with Standard Chartered Bank, Morgan Stanley and Credit Suisse Managing Partner of Cartesian Royalty Holdings, Singapore Non-Executive Director of Axiom Mining Joined the Board in 2017



## **Value Proposition**

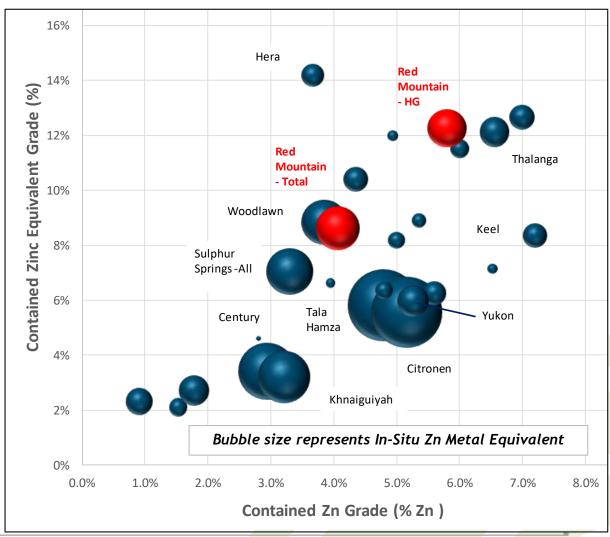
Red Mountain is one of the highest grade and more significant deposits of any zinc company listed on the ASX<sup>1</sup>.

1 Source:- DJ Carmichael.



Valuation:6 cents per WRM share

Source:- DJ Carmichael



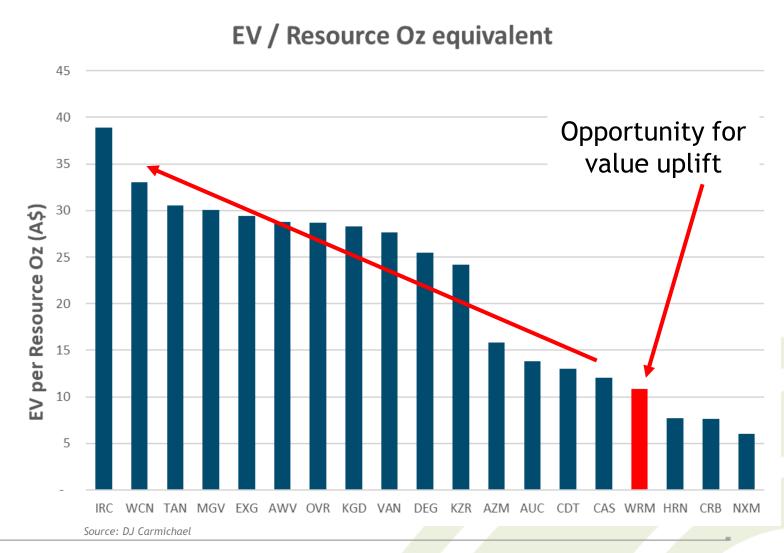
## Under-valued Relative to our Gold Peers

- 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.

## <u>NB:-</u>

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

Valuation:2 cents per WRM share



# **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>
Mt Carrington gold / silver development	<ul> <li>Low risk development project with DFS commenced</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>
Jurisdictional diversification	Projects in Alaska and NSW, both low risk investment destinations
Highly credentialed board and management team	Track record of delivering projects
Value growth and near term news flow	Potential for WRM to substantially rerate when compared to the zinc peer group Ongoing news flow from drilling campaigns and project development pathway



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