WHITE ROCK
Minerals Ltd

Zn Zinc | Au Gold | Ag Silver

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Investor Presentation

Strauss gold pit, Mt Carrington

July 2019

Presentation Overview

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1. Executive Summary

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Overview

- ASX listed explorer and near-stage producer.
- Two projects:-
  - *i. Mt Carrington gold-sliver project in NSW;*
  - *ii. Red Mountain high grade zinc and precious metals project in Alaska.*
- Strong Board & management team.

i. Mt Carrington

- **"Shovel ready"**
  - *PFS completed, on existing Mining Lease, with*
  - *>A$20m of infrastructure from previous owners.*
- Project summary:-
  - *Initial 4 to 5 year mine life for gold plus a possible 2 to 3 years for silver;*
  - *Producing 35k oz gold at AISC of A$1,200;*
  - *$35m capex;*
  - *<2 year capex payback, and*
  - *Exploration upside for gold, silver and copper.*

Mt Carrington, NSW

ii. Red Mountain

- **World class Zinc project:-**
  - *JORC Resource of >9mt at 12.9% Zinc equivalent;*
  - *Majority of the 475 km^2 tenement package is unexplored.*
- Joint Venture with Sandfire Resources
  - *Exploration spending of A$20m over 4 years to earn 51%;*
  - *A further $10 million plus PFS to increase to 70%.*
- Significant upside and news flow with funding provided by Sandfire Resources.

Red Mountain, Alaska

1. Executive Summary (cont)

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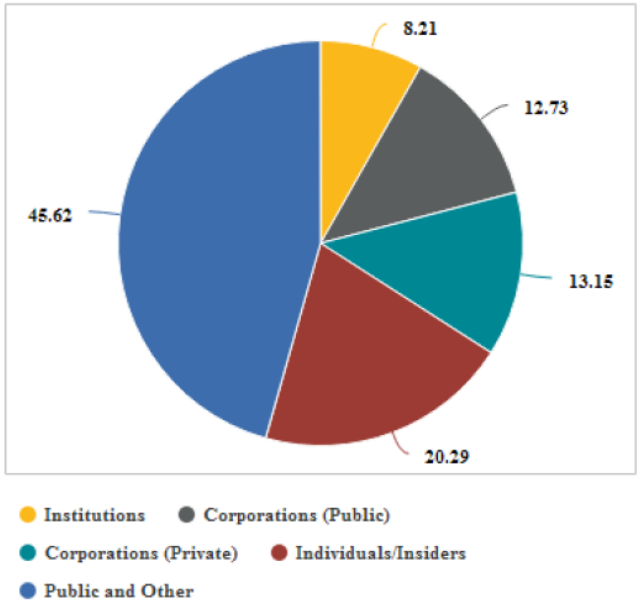
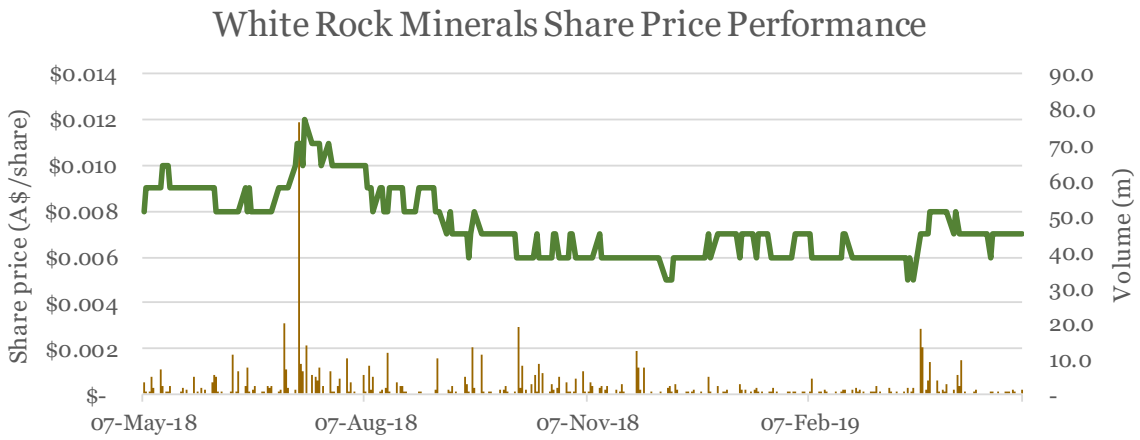
Capital Structure	
ASX Code	**WRM**
Fully paid shares on issue	1,636m
Unlisted options	565m
Market Cap (@ ~0.6c/share)	**$9.8m**
Debt	Nil
Cash on hand (March 2019)	**$1.85m**

Top Shareholders (as at 30 June 2019)	
Sandfire Resources (ASX company)	12.7%
Michael Lan (HNW)	6.2%
Suetone P/L (HNW)	5.2%
Avalon Ventures (HNW)	4.9%
Cartesian (NY PE)	4.7%
Zijin / Sprott A/M Fund (Institution)	3.7%
Top 20 Shareholders	**53.7%**

Ownership Summary

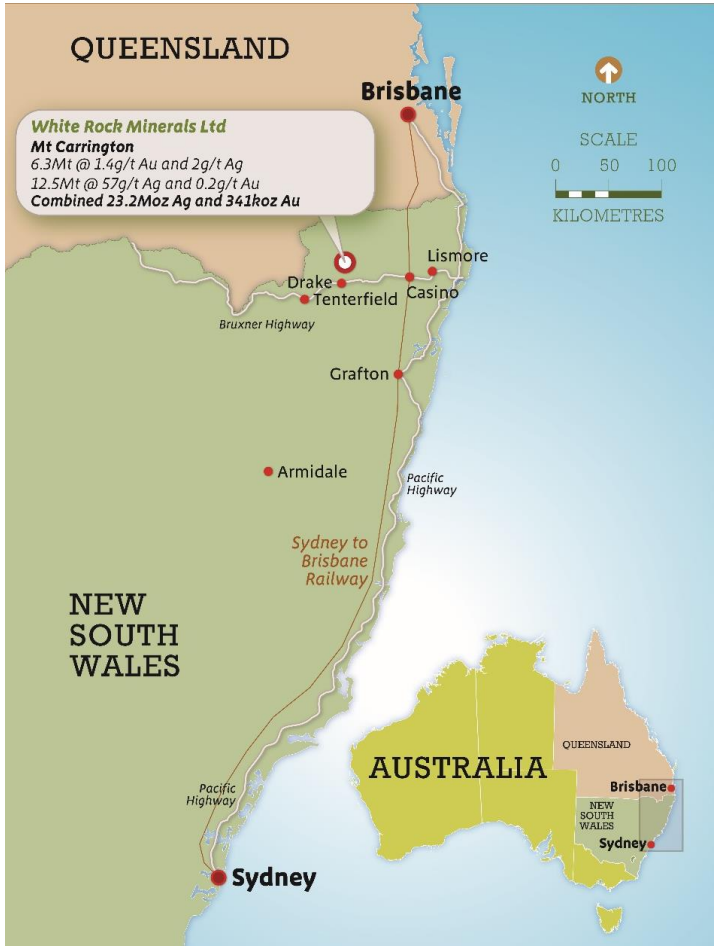




2. Mt Carrington

2.1 Overview

- Gold and Silver near-term production asset.
- JORC Mineral Resource[1] of 341,000 ounces gold & 23.2 million ounces of silver.
- Pre-Feasibility Study for the Gold First Stage completed[2].
- Maiden JORC Ore Reserve[1] of 159,000 ounces gold.
- Gold, silver and copper exploration upside.



1 The Mt Carrington project hosts JORC estimates of Inferred and Indicated resources, and a Probable Reserve – refer cautionary statement on slide 25

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

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2. Mt Carrington (cont)

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2.2 Infrastructure

- Key Infrastructure in place
  - *Valued at ~A$20M*[1]

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

- Reduces development risk, timeframe & cost.

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

2. Mt Carrington (cont)

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2.3 Mineral Resource[1]

Stage One focus on the Strauss and Kylo Gold deposits.

Stage Two focus on the Lady Hampden and White Rock silver deposits.

MT CARRINGTON MINERAL RESOURCES						
Gold Dominant						
Resource Category	**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**

MT CARRINGTON MINERAL RESOURCES						
Gold Dominant						
Resource Category	**Deposit**	**Tonnes**	**Gold grade (g/t)**	**Gold ounces**	**Silver grade (g/t)**	**Silver ounces**
Inferred	Red Rock	1,630,000	1.0	54,000	3.5	182,000
	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						
Resource Category	**Deposit**	**Tonnes**	**Gold grade (g/t)**	**Gold ounces**	**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	***7,620,000***	***225,000***	***8,477,000***
Inferred	***11,150,000***	***116,000***	***14,770,000***
Total	**18,770,000**	**341,000**	**23,247,000**

1. The Mt Carrington project hosts JORC estimates of Inferred and Indicated resources – refer cautionary statement on slide 25

2. Mt Carrington (cont)

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2.4 Project Status

Pre-Feasibility Study[1]

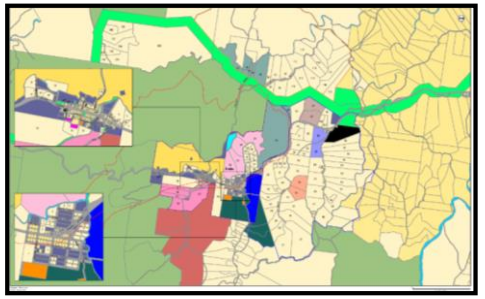
- Gold to be mined first, Silver at a later stage:-
  - *Maiden Ore Reserve declared: 159,000 ounces gold;*
  - *A production rate of 1,000,000 tpa;*
  - *Gold production of 35,000 ounces per annum; and*
  - *Total gold produced of 148,000 oz gold over this initial 4 ½ year Gold First Stage.*

A$36M free cash flow, IRR 34%, AISC $A1,200/oz, <2 year payback at A$1,700/oz.

At A$2,100/oz, NPV_8 is >2x CAPEX, A$95M free cash flow, IRR 82%, 11 month payback.

Permitting

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



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

3. Red Mountain

3.1 Sandfire JV

In summary[1]

STAGE ONE: EXPLORATION

- Sandfire can earn 51% equity by spending A$20 million over four years.
- Minimum commitment of A$6m in Year One (2019).

STAGE TWO: PFS

- Sandfire can increase to 70% equity by spending a further A$10 million over two years and delivering a Pre-Feasibility Study.

STAGE THREE: DFS

- Sandfire to complete a Definitive Feasibility Study.
- White Rock can choose to contribute its percentage share of expenditure to retain its interest.
- Alternatively, if Sandfire sole funds DFS, its interest increases to 80%.

STAGE FOUR: DEVELOPMENT

- White Rock can choose to contribute its percentage share of expenditure to retain its interest.
- Alternatively, if Sandfire sole funds DFS, its interest increases to 90% and White Rock must repay 10% of total capital out of cashflow.

Significant leverage to upside with low capital commitment

1. *Refer ASX Announcement 10 July 2018 – "White Rock enters into Strategic Relationship with Sandfire"*

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3. Red Mountain (cont)

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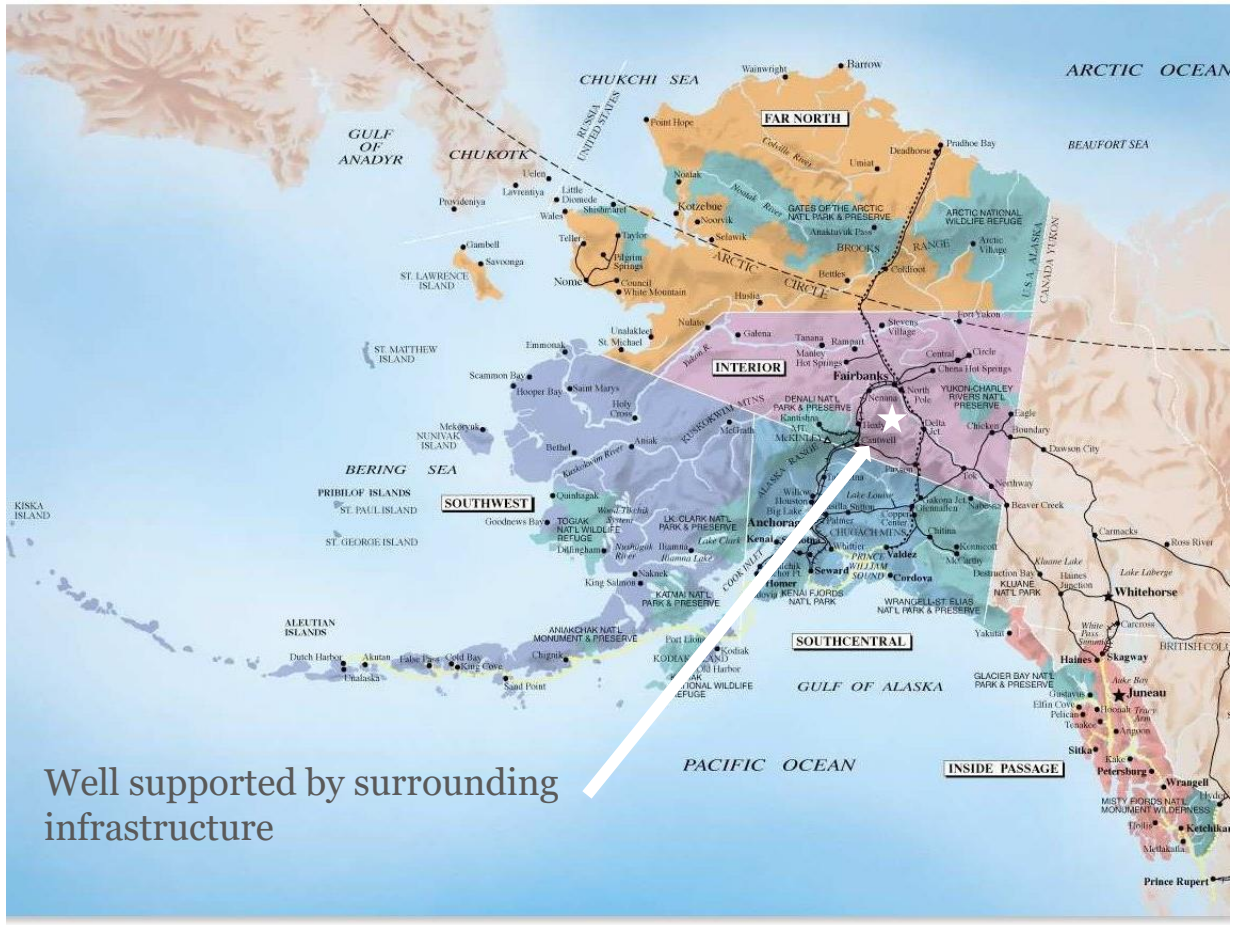
3.2 Project Summary

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

- Within the existing global resource[2] is a high-grade resource of **9.1Mt at 12.9% Zn equivalent** (using a 3% Zn cut-off grade).

- One of the highest grade and more significant deposits of any zinc company listed on the ASX:-
  - ✓ *Mineralisation from surface.*
  - ✓ *Highly prospective 475km² land position.*
  - ✓ *Historic exploration from 1975-1999 leaves significant upside with utilization of modern techniques.*



[1] *Source: IIR Report, July 2017. ASX Release 11 July 2017.*

[2] *The Red Mountain project hosts JORC estimates of Inferred resources – refer cautionary statement on slide 25.*

3. Red Mountain (cont)

3.3 Mineral Resource[1]

Table 1: Red Mountain April 2017 Inferred Mineral 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**

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

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**

[1] The Red Mountain project hosts JORC estimates of Inferred resources – refer cautionary statement on slide 25.

[1] Refer ASX Announcement 26 April 2017 – "Maiden JORC Mineral Resource at Red Mountain Zinc Silver Project"

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3. Red Mountain (cont)

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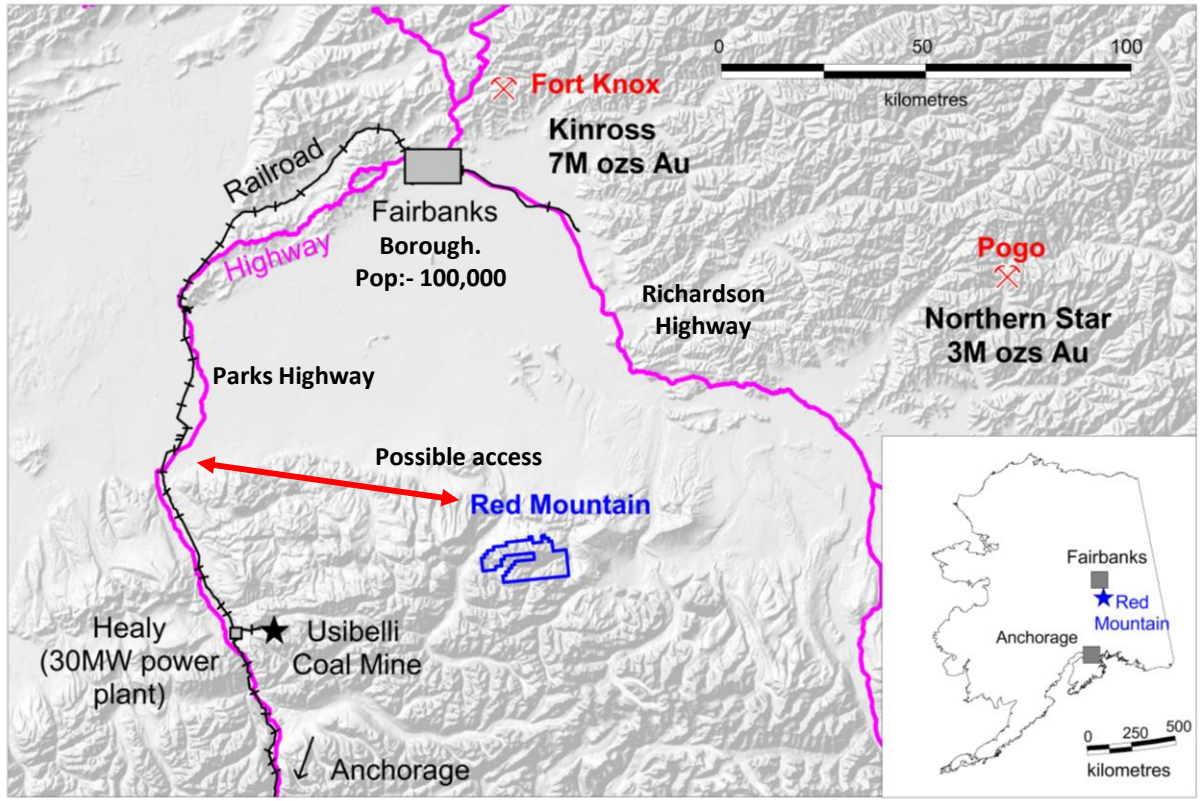
3.4 Infrastructure

- Alaska ranked 5th out of 83 jurisdictions by the Fraser Institute.

- Well located with respect to infrastructure and logistics:-
  - ✓ *Major road and rail access located 120km west, and 85km north;*
  - ✓ *All weather road and rail 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.*



4. Exploration Upside

4.1 Mt Carrington

Over 180km^2 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,*
  - *Geochemical 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.*

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4. Exploration Upside

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4.1.1 Mine Life Expansion

Gold Resources[1]

1. Red Rock
- Inferred 54,000 ounces gold.

2. Guy Bell
- Inferred 13,000 ounces gold.

Gold – Silver Resources[1]

3. Lady Hampden
- Indicated 37,000 ounces gold and 4,100,000 ounces silver.
- Inferred 27,000 ounces gold and 4,000,000 ounces silver.

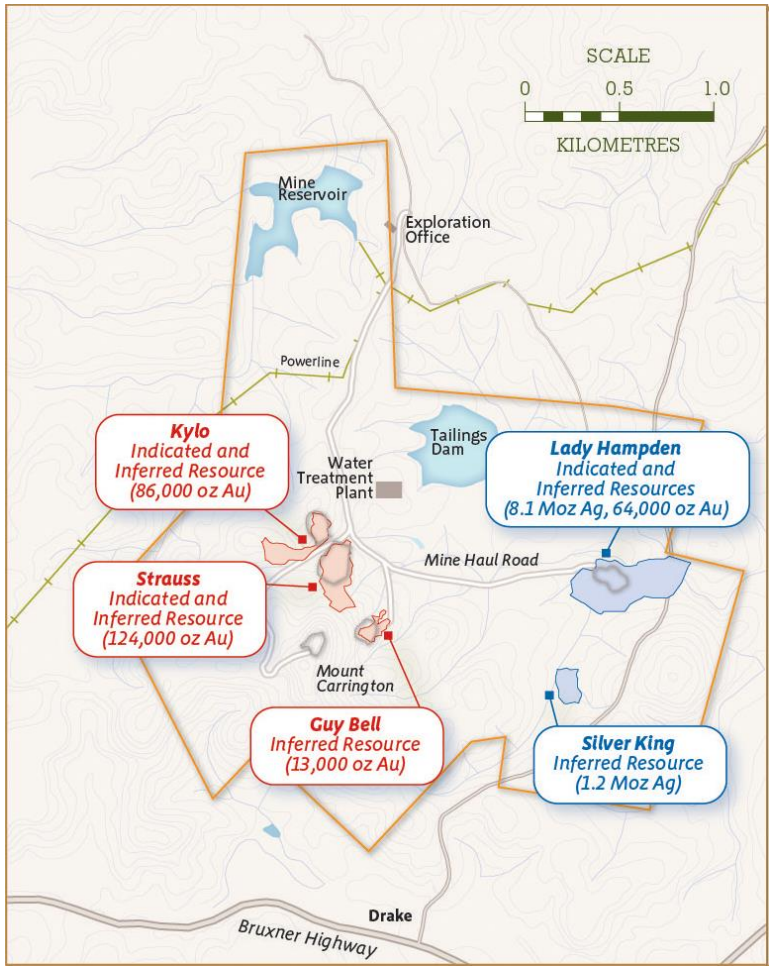
Silver Resources[1]

4. White Rock
- Indicated 4,200,000 ounces silver.
- Inferred 4,000,000 ounces silver.

5. Silver King
- Inferred 1,200,000 ounces silver.

6. White Rock North
- Inferred 5,300,000 ounces silver.

Silver could add three years of mine life.



1 The Mt Carrington project hosts JORC estimates of Inferred and Indicated resources – refer cautionary statement on slide 25

4. Exploration Upside (cont)

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4.1.2 Nearby Gold Targets

- **Multiple zones of gold mineralisation**
  - *with high-grade gold potential analogous to classic epithermal vein targets.*

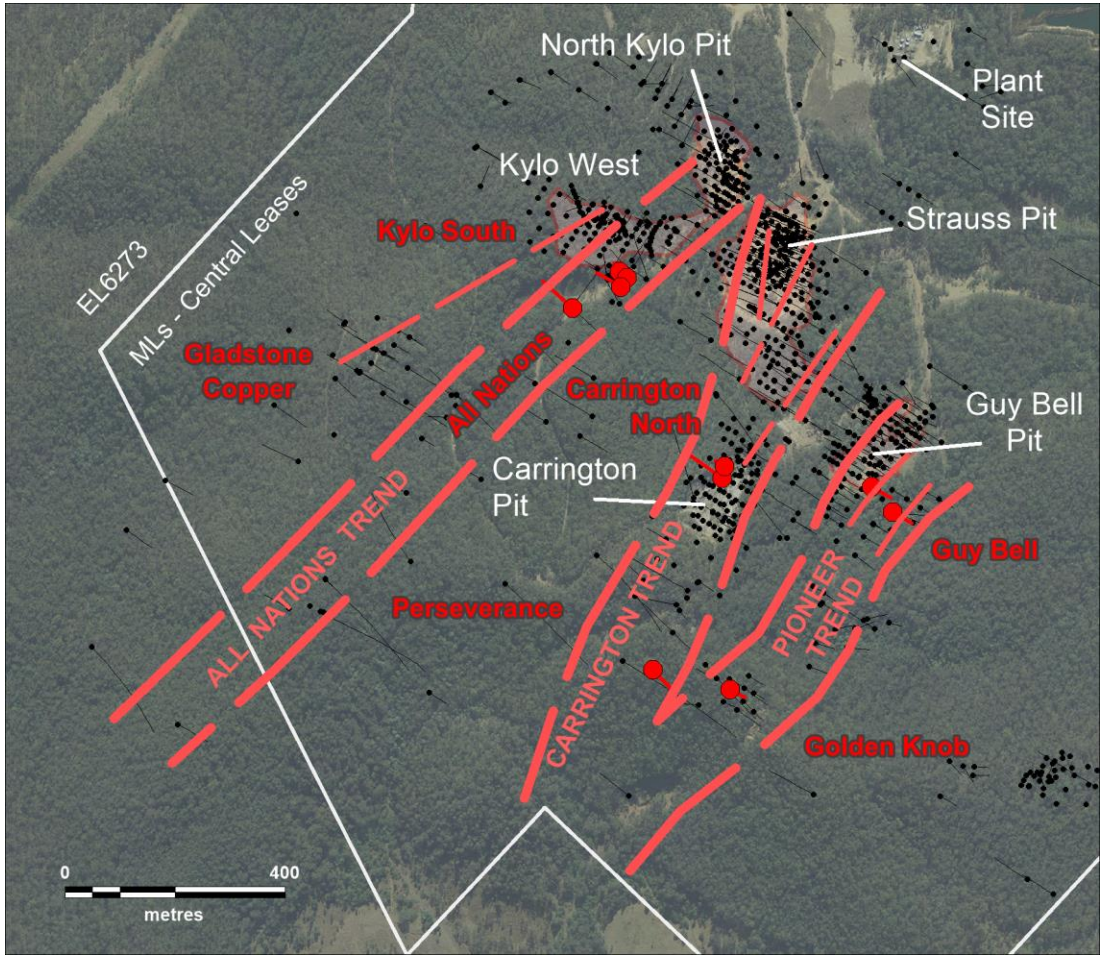
- Focus on **exploration for high-grade vein structures**
  - *that feed known stock work Mineral Resources (Kylo / Strauss / Guy Bell / Carrington).*

- **All Nations Zone** as a standout target
  - *400m strike potential not drilled, includes*
    - ✓ 0.85m @ 18.2g/t Au from 76.5m (ANDD003)[1]
    - ✓ 0.4m @ 17.2g/t Au from 96.6m (ANDD003)[1]

- **Other target / zones with high grade drill hole intersections for follow up:**

i. *Kylo South*
ii. *Perseverance*
iii. *Golden Knob*
iv. *Carrington North*
v. *Guy Bell*

- **Significant copper potential remains to be tested beneath shallow mineralisation at Gladstone – zoned intrusion related mineralisation.**

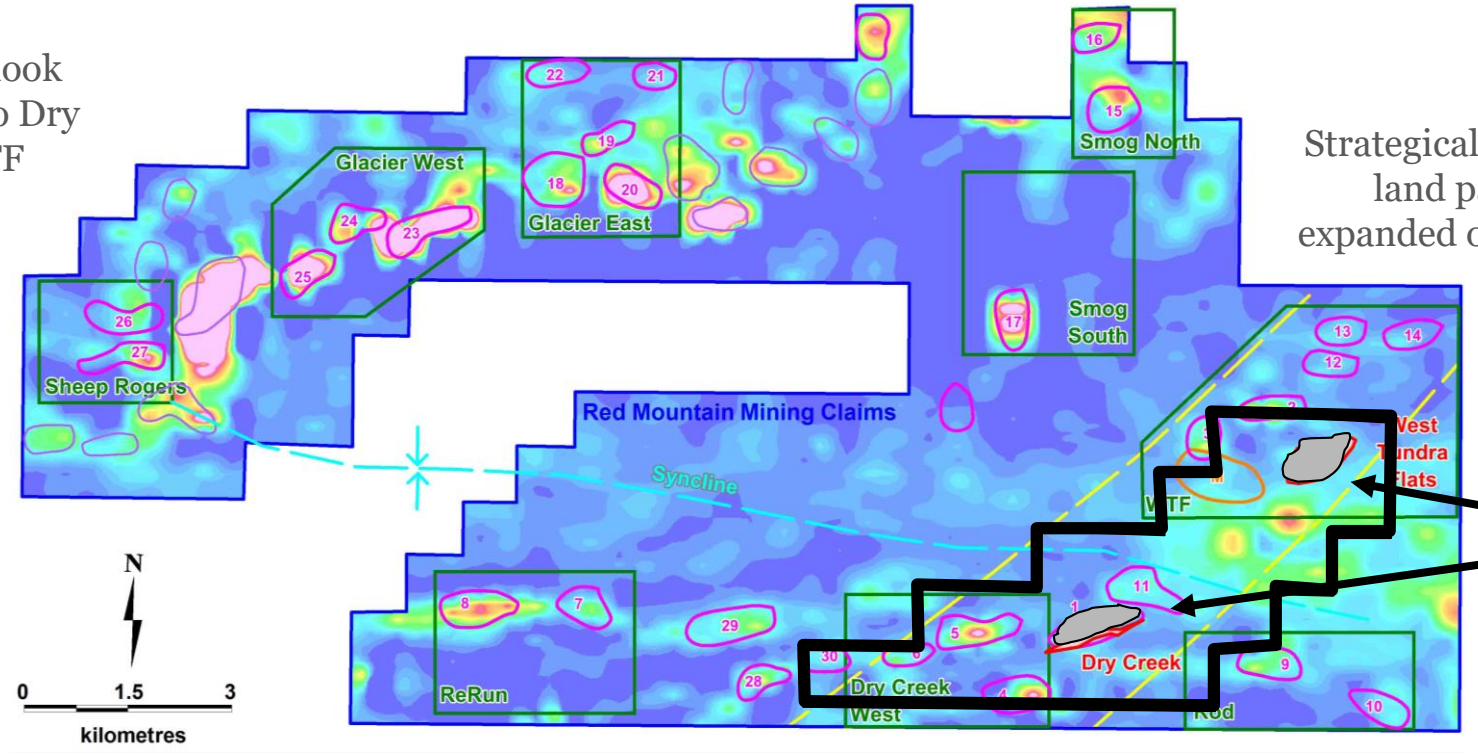


1 Refer to ASX Announcement by Rex Minerals Ltd 28 September 2009

4. Exploration Upside

4.2 Red Mountain

Identified 30 look alike targets to Dry Creek and WTF



Strategically significant land package – expanded out to 143km²

Existing deposits & original 16km² claims area

Conductivity targets prioritised by geochemistry:

- Geochemical alteration proximal to VMS mineralisation
- Direct base metal and precious metal anomalies

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4. Exploration Upside (cont)

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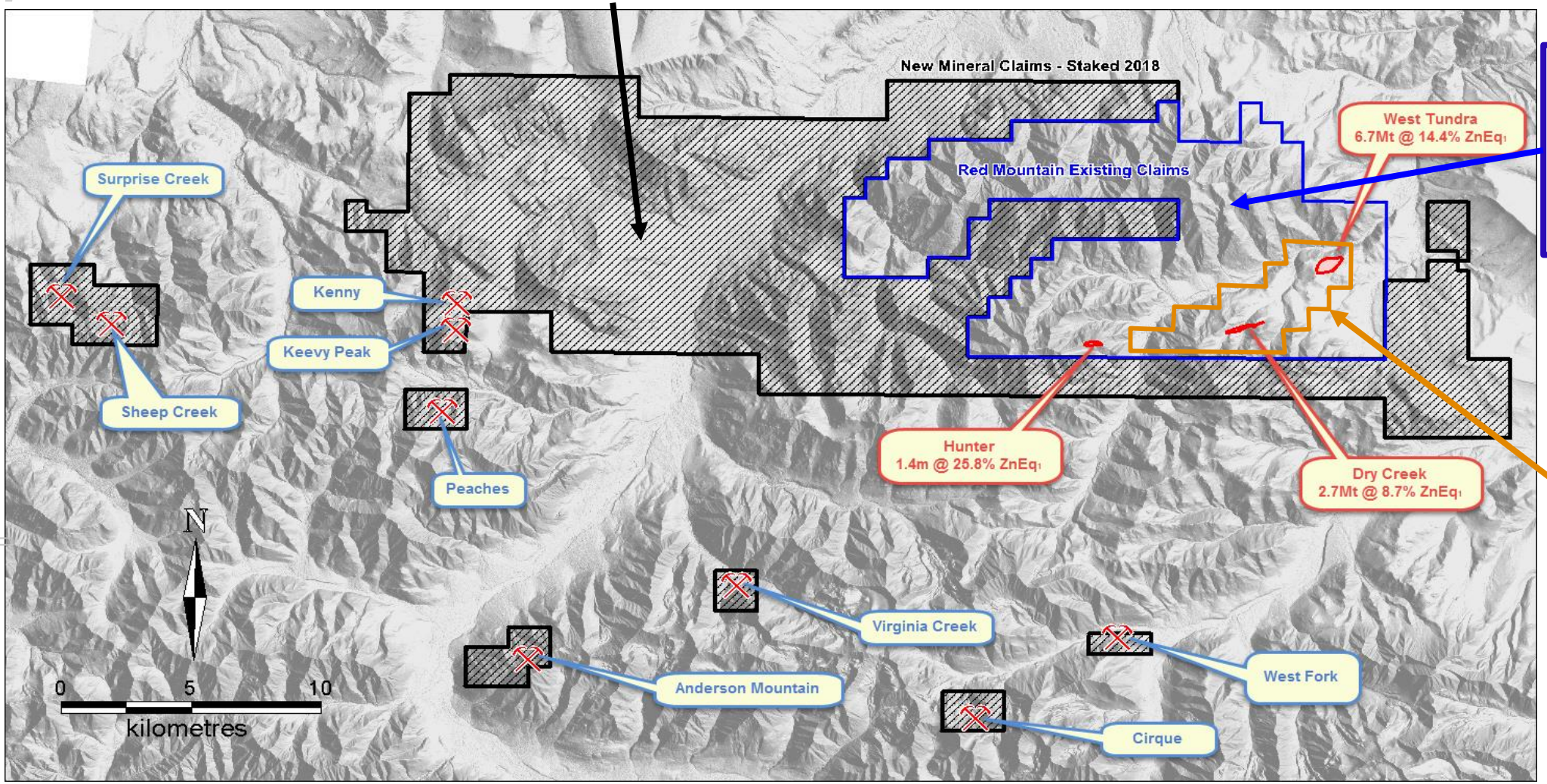
Oct 2018 - Strategically significant land package – expanded out to 475km^2



New discovery & 2016 expanded claims area

Existing deposits & original claims area

4. Exploration Upside (cont)

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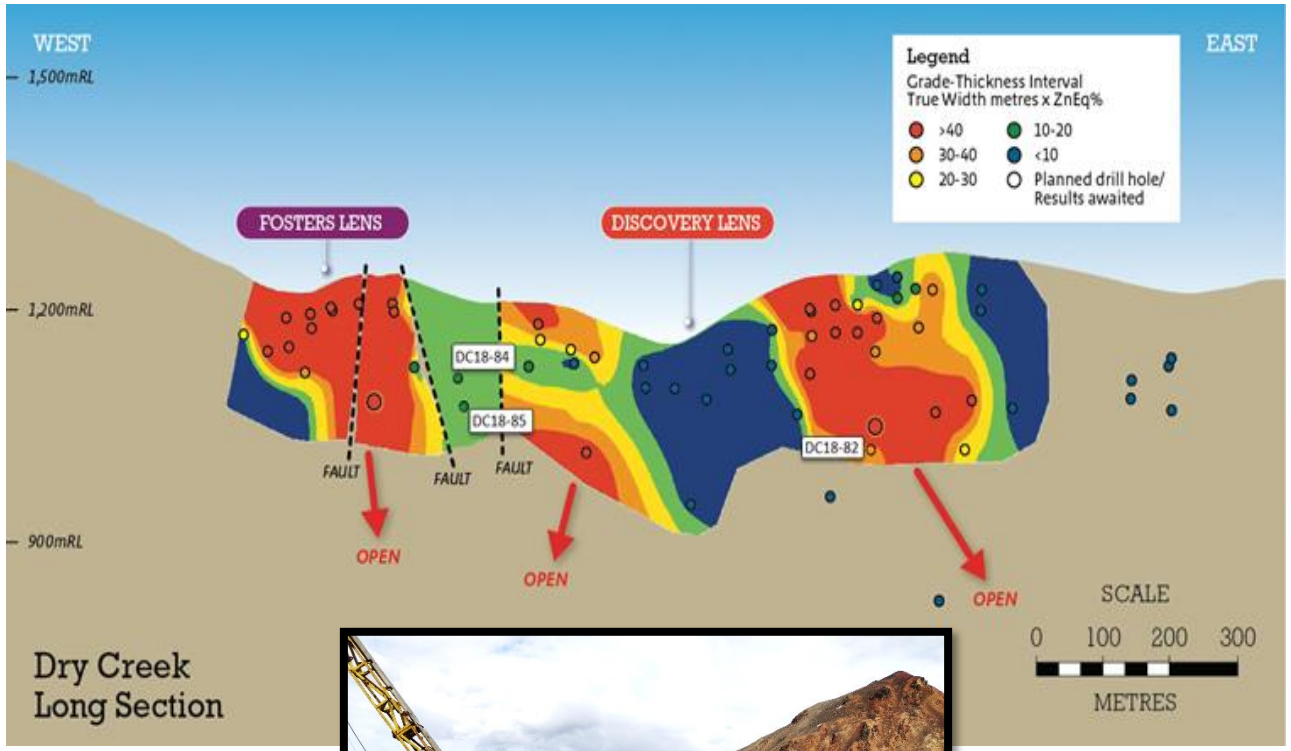
Red Mountain
WRM's first drilling program - 2018

Nine of the twenty four holes drilled returned grades in excess of 10% ZnEq, and three of these greater than 35% ZnEq – a great return in only our first field season.

- ✓ ***4.7m*** *@ 19.5% zinc, 7.8% lead, 466g/t silver, 6.9g/t gold and 1.5% Cu for* ***49.7% zinc equivalent***[1] *(DC18-79) from 231.1m.*
- ✓ ***4.3m*** *@ 4.8% zinc, 2.3% lead, 1,435g/t silver, 2.2g/t gold and 0.5% Cu for* ***43.2% zinc equivalent***[1] *(DC18-77) from 168.8m.*
- ✓ ***3.5m*** *@ 15.1% zinc, 6.7% lead, 518g/t silver, 2.1g/t gold and 0.2% Cu for* ***35.2% zinc equivalent***[2] *(WT18-28) from 60.6m.*



1. *Refer ASX Announcement of 4 July 2018 "White Rock - High Grade Zinc Intercepts Extend Mineralisation"*
2. *Refer ASX Announcement of 18 June 2018 "White Rock-Initial Drilling Delivers High Grade Zinc Results"*

5. Development Plan

5.1 Mt Carrington

➢ **Transition to Production:**

Stage One - Gold Project (subject to funding):-

- *Take to DFS in 2020;*
- *Base line studies and submit the EIS in 2020; and*
- *Construction and commissioning in 2021.*

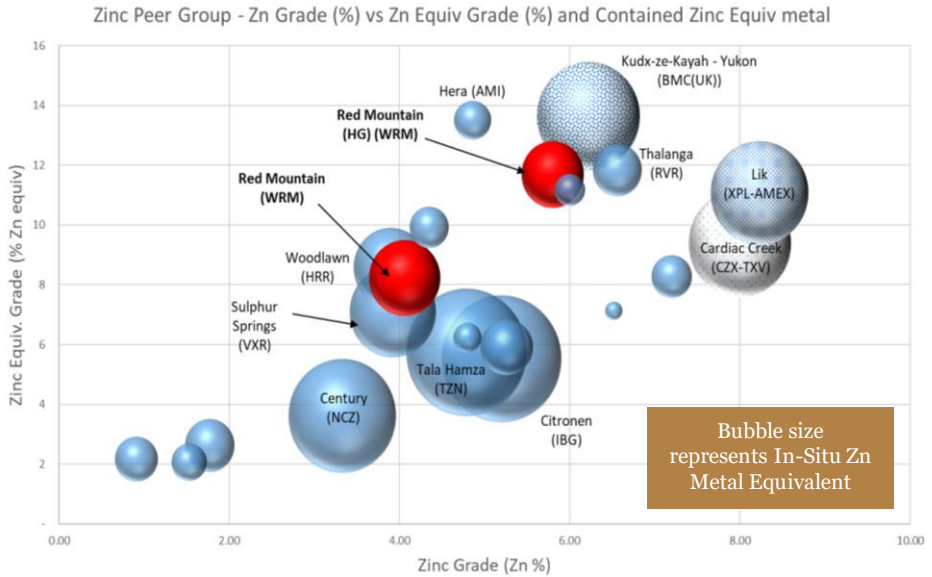
Stage Two - Silver Project (subject to funding):-

- *Begin silver project mining plan;*
- *Further recovery test work;*
- *Concentrate sales discussions; and*
- *Complete the flow sheet design.*

5.2 Red Mountain

➢ **Further exploration and development:-**

- *Exploration follow-up in 2019;*
- *Completion of field studies;*
- *Target identification and drilling;*
- *Additional joint exploration and development with Sandfire.*



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

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5. Development Plan (cont)

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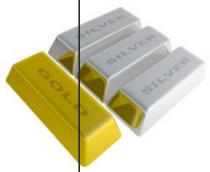
	2019	2020	2021	2022	2023
Mt Carrington Stage 1 - Gold	Definitive Feasibility Study 12 months		Construction & Commissioning 12 to 18 months		Production
	EIS Base Line Studies, Community Engagement & Permitting 18 to 24 months				
Mt Carrington Stage 2 – Silver		Silver recovery test work and flow sheet design			4 years after Gold Production
Mt Carrington Gold & Silver LoM Extension			Life-of-Mine Extensional and Exploration Drilling		Life-of-Mine Extensional and Exploration Drilling



6. Board & Management

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Peter Lester
Non-Executive Chairman
B.E (Mining), MAusIMM, MAICD

Mining Engineer

40 years operational and corporate experience.

Director since April 2013.

Chairman of Helix Resources (Cu), Non-Exec Director of Millennium Minerals Ltd (Au).

Past Chairman of Kidman Resources (Au & Li) and Doray Minerals (Au).

Matt Gill
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 (Tasmania, WA, Victoria, NSW) and overseas (PNG, India, Bolivia, Ghana and Myanmar).

Non-Exec Director of AuStar Gold (Au).

Joined the Company in 2016.

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

Corporate Finance

25 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 (Ni).

Joined the Board in 2017.

Stephen Gorenstein
Non-Executive Director
B.Sc (Hons, Geology & Geophysics), Masters Accounting (Finance)

Business Development

15 years in capital markets including equity analyst roles at both Goldman Sachs JB Were and Bank of America Merrill Lynch.

Extensive experience in mining business development and M&A.

Director and Partner of Jindalee Partners and a Non-Executive Director of Parazero Ltd since October 2018. Joined the Board in 2018.

Rohan Worland
Exploration Manager
BSc (Hons, Geology), Grad. Dip (Finance & Investment), MAIG

Geologist - Exploration and Business Development

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

Been with the Company since it was founded in 2010.

7. Why Invest in White Rock Minerals?

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✓ **Mt Carrington gold – silver - copper**	Development project with an advanced PFS and a maiden JORC Reserve. • Reduced timeline to gold and silver production. • Brownfields development and reduced capex requirement with infrastructure to support mining in place. • Option on project financing in place.
✓ **Red Mountain zinc – silver – gold VMS**	• High grade, large resource – top quartile for global VMS projects. • Established and supportive mining jurisdiction. • Sandfire Resources cornerstone investment and strategic relationship with a JV option and is a strong endorsement to the quality and potential of the project.
✓ **Exciting exploration upside**	• The Red Mountain deposits remain open down dip and in some places along strike, offering resource increase potential. • High-grade zinc and silver VMS potential from identified targets surrounding the known Red Mountain deposits within a large strategic tenement package. • Gold, silver and copper exploration potential at Mt Carrington.
✓ **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 a near-term production development project at Mt Carrington and exploration and drilling campaigns at Red Mountain.
✓ **Jurisdictional diversification**	Projects in Alaska and NSW, both low risk investment destinations.
✓ **Board & Management team**	Broad and deep resources industry experience with a track record of delivering projects.

7. Reasons to Invest (cont)

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Mt Carrington: **At the current gold price of >A$2,000/ounce, the project has a one year payback.**

Gold price	A$1,700*	A$1,800	A$1,900	A$2,000	A$2,100
NPV_{10}	$21.2M				
NPV_8	$23.9M	$36.0M	$48.2M	$60.3M	$72.5M
IRR	34%	46%	58%	70%	82%
Free Cash	$36.7M	$51.3M	$65.8M	$80.4M	$95.0M
Payback Period	22 months	18 months	15 months	13 months	11 months

* *December 2017 PFS Outcomes using A$1700/oz.*

With potential upside:-

- *Including Silver adds another two-three years mine life; and*
- *Drilling out remaining six near mine identified gold prospects.*

8. Valuation Metrics

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Researcher	Red Mountain Valuation	Mt Carrington Valuation	TOTAL
Fundamental Research Corp [1,2]	$42.6M	$29.6M	$72.2M
Baillieu Holst [3]	$72.5M (mid-point)	$22.8M	$95.3M
Range	$42M - $72M	$22M - $29M	**$64M - $101M**

White Rock market cap is currently $11.5M (based on a Company share price of 0.7cps)

Investment Opportunity?

1. *ASX Announcement 1st March 2018*
2. *WRM Website posted June 2018*
3. *WRM website posted September 2018*

Disclaimer & Cautionary Statement

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The presentation (in this projected form and as verbally presented) ("Presentation") has been prepared by White Rock Minerals Limited and is provided on the basis that none of the Company nor its respective officers, shareholders, related bodies corporate, partners, affiliates, employees, representatives and advisers make any representation or warranty (express or implied) as to the accuracy, reliability, relevance or completeness of the material contained in the Presentation and nothing contained in the Presentation is, or may be relied upon as a promise, representation or warranty, whether as to the past or the future. The Company hereby excludes all warranties that can be excluded by law.

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 www.asx.com.au and other publicly available information on the Company's website at www.whiterockminerals.com.au.

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 26th 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.

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WHITE ROCK
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Thank you.

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Camp at Red Mountain, central Alaska

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White Rock Minerals
Who we are

- ✓ **An Australian-based and listed zinc, silver, gold and lead company with 3.7Moz of gold equivalent[1].**
- ✓ **High quality assets in Australia and USA offering geological, geographical and commodity diversification for investors.**
- ✓ **Mount Carrington (100%) owned, gold and silver project, with a JORC Ore Reserve[2] and on ML.**
- ✓ **Red Mountain Project (Alaska) is a globally significant zinc and precious metals VMS Project.**
  - ✓ Sandfire Resources NL (ASX:SFR) (Sandfire) has joined forces with White Rock Minerals to fund exploration and development.
  - ✓ Total Mineral Resources[3] of **9.1Mt at 12.9% ZnEq[4] grade**.
  - ❖ Modern exploration campaign to increase the known zinc – silver – lead – gold JORC resource as well as to discover further deposits – aimed to generate strong results and a high level of news flow.
- ✓ **Strong potential for significant rerating when compared to our zinc and gold peer groups.**
- ✓ **Highly-credentialed and regarded management team and board.**

1. *Refer Footnotes on slide 29*
2. *The Mt Carrington project hosts JORC estimates of Inferred and Indicated Mineral Resources, and a Probable Ore Reserve – refer cautionary statement on slide 25*
3. *The Red Mountain project hosts JORC estimates of Inferred Mineral Resources – refer cautionary statement on slide 25*
4. *Refer Cautionary Statement on slide 25*

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White Rock Minerals
Quality Asset Portfolio

Mount Carrington, New South Wales

- Gold and silver development asset.
- JORC Mineral Resources[1]
  - ✓ 341,000 ounces of gold and 23.2 million ounces silver.
  - ✓ Maiden JORC Ore Reserve of 159,000 ounces gold.
- 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.
- Exploration upside for gold, silver and copper.

Red Mountain, Alaska

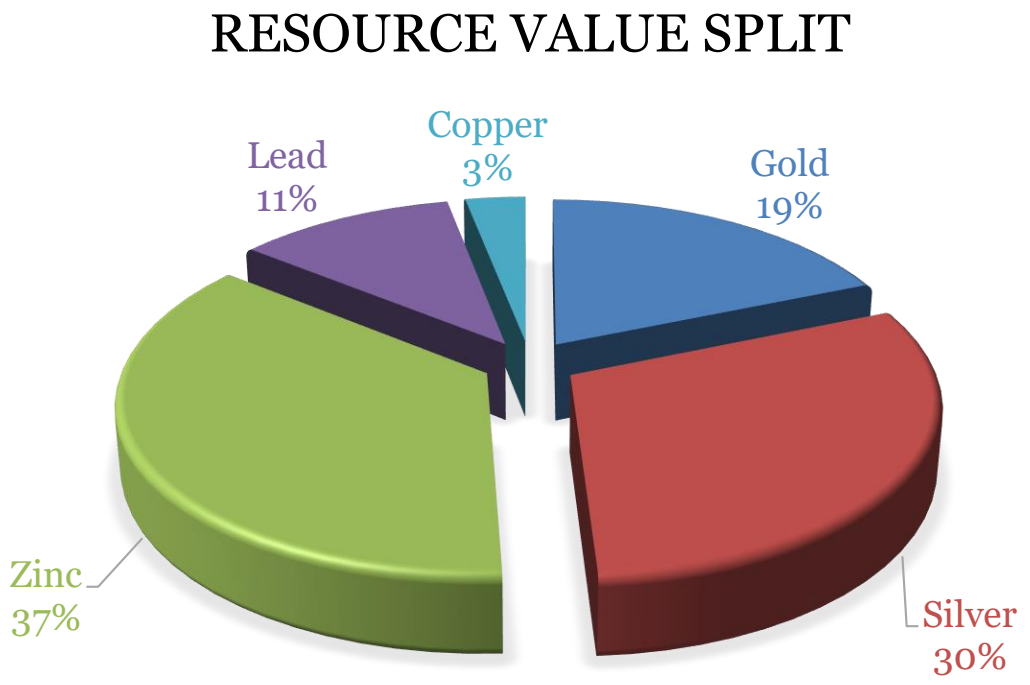
- JV with Sandfire Resources – significant investment of $20M over 4 years (Stage One) to earn 51%.
- Polymetallic VMS deposit targets.
- JORC Mineral Resources[2]:
  - ✓ Impressive base metal and precious metal content with 678,000t (1.5B lbs) zinc, 286,000t (0.6B lbs) lead.
  - ✓ 53.5 million ounces silver and 352,000 ounces gold.
  - ✓ Outstanding grades from surface and open at depth and at places along strike.
- 100km south of Fairbanks, close to extensive mining infrastructure in a mining friendly jurisdiction.
- Significant exploration upside in a highly prospective yet under-explored terrane, which hosts multi-million tonne base metal deposits.

1. *The Mt Carrington project hosts JORC estimates of Inferred and Indicated Mineral Resources, and a Probable Ore Reserve – refer cautionary statement on slide 25*
2. *The Red Mountain project hosts JORC estimates of Inferred Mineral Resources – refer cautionary statement on slide 25*

Global scale across Gold, Silver and Zinc

- The aggregate of WRM's Resources is globally significant – equivalent to 3.7M gold ounces.
- WRM has a diversified portfolio of tenements with exposure to:
  - High-grade zinc and precious metals (Red Mountain, Alaska);
  - Gold and silver (Mt Carrington, NSW).

Mt Carrington Mineral Resource[1]		
	Contained Metal	Gold Equivalent Ounces
Gold (ozs)	341,000	341,000
Silver (ozs)	23,200,000	377,500
Total		**718,500**
Red Mountain Mineral Resource[2]		
	Contained Metal	Gold Equivalent Ounces
Gold (ozs)	352,000	352,000
Silver (ozs)	53,500,000	750,831
Zinc (t)	678,000	1,371,769
Lead (t)	286,000	419,997
Copper (t)	26,000	116,327
Total		**3,010,924**
Combined Gold Equivalent Ounces		**3,729,425**



1. *Mt Carrington gold equivalent ounces 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: Gold Equivalent =100 x [(Au g/t x 1,227 x 0.828) + (Ag x 19.68 x 0.84)] / (1,227 x 0.828).*
2. *Red Mountain gold equivalent ounces 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: Gold Equivalent =100 x [(Zn x 2,206.7 x 0.9) + (Pb x 1,922 x 0.75) + (Cu x 6274 x 0.70) + (Ag x 19.68 x 0.70) + (Au g/t x 1,227 x 0.80)] / (1,227 x 0.80). White Rock is of the opinion that all elements included in the metal equivalent calculations have reasonable potential to be recovered and sold.*

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White Rock History

WHITE ROCK Minerals Ltd

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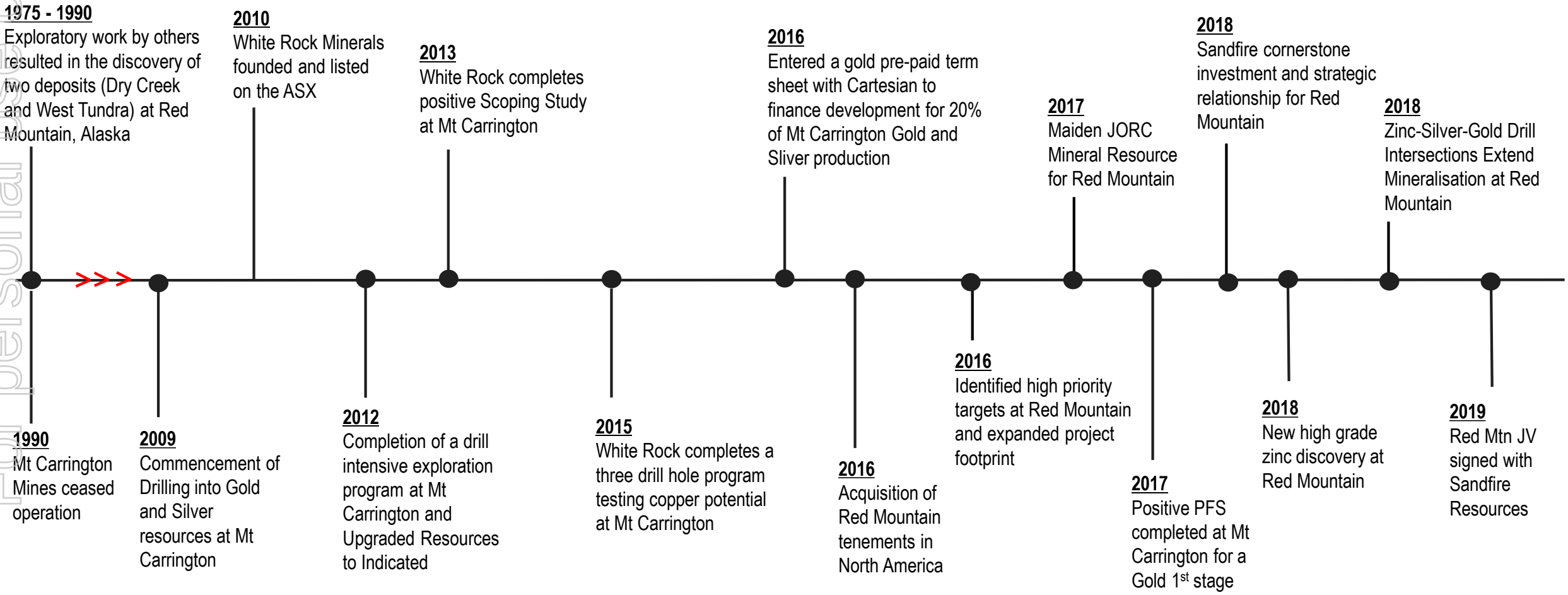
WRM's focus has been on the development of the Mt Carrington gold-silver resource in NSW and more recently the exploration of the high grade Red Mountain zinc-silver-lead-gold volcanogenic massive sulphide (VMS) deposits in Alaska.



Mt CARRINGTON KEY INVESTMENT HIGHLIGHTS

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✓ **First-world jurisdiction**: located in New South Wales ("NSW"), Australia, which has a number of existing operating mines and development projects.

✓ **Brownfields Project**: historical mining occurred at the Project area by various companies up until 1990. On granted Mining Lease, 1st two gold pits already pre-stripped.

✓ **Significant infrastructure in place**: close proximity to major roads, railway, small towns, existing tailings storage facility with capacity for expansion, a freshwater dam, site exploration and mining office, an RO water treatment plant and connection to the NSW power grid.

✓ **Capital requirement reduced**[1]: given the existing infrastructure, start-up capital is estimated at only A$36m (inc. $4M contingency) (on-site existing infrastructure estimated at A$20m).

✓ **JORC Resources**[2]: **341,000oz contained gold** (277,000oz at 1.4g/t in gold dominant deposits) and **23.2Moz of contained silver** (22.8Moz at 57g/t in silver dominant deposits).

✓ **JORC Reserve**[2]**:** released in December 2017, a maiden JORC Reserve of **3.47mt @ 1.43g/t gold for 159,000 ounces** has been defined in the first two gold deposits to be mined.

✓ **Positive PFS**[1]: released in December 2017, and targeting an optimised mine plan focused on the Gold First stage initially, generating **free cash flow of A$36m** and an **IRR of 34%,** over an initial 4 1/2 year mine life, with mining of the silver dominant deposits (8M ozs of silver already in the Indicated category) contemplated to follow for a further three years (estimated). Payback less than 2 years.

✓ **Favourable geology**: hosted in the Drake Volcanics in the New England Fold Belt. Mineralisation is typically hosted by stockwork-style quartz veining or disseminated sulphides, within silica-illite-pyrite alteration.

✓ **Upside potential**: near-mine and regional targets exist at the Project for both gold and silver complimenting the existing resource base, as well as for intrusive-related copper-gold porphyry systems. White Rock has a strategic 183km^2 land holding under EL surrounding the ML.

✓ **Strong fundamentals**: long-term gold price consensus of approximately A$1,630/oz[1].

Note: 1. Capital IQ consensus long-term gold price.

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

2 The Mt Carrington project hosts JORC estimates of Inferred and Indicated resources, and a Probable Reserve – refer cautionary statement on slide 25

Mount Carrington
A rich mining history

- **Historic mining centre**
  - Gold discovered in the region in 1886
  - 1974 - 76 Mt Carrington Mines Ltd extracted a small tonnage of high grade Ag and Au from the Lady Hampden open pit.
  - In 1988 a new mining campaign focused on extracting open pit oxide Au/Ag ore from the Strauss, Kylo, Guy Bell and Lady Hampden deposits.
- **Mining-friendly community**
  - Strong local support for development
  - Local and state government support
- **Well-established infrastructure**
  - Roads
  - Utilities
  - Close to established towns Drake, Tenterfield, Casino and Lismore
- **Previously disturbed ground**
  - Makes approvals process much easier – is a development and rehabilitation project
  - Can rely on previous mining for 'proof of concept' metallurgy, groundwater, environmental etc

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Mine Plan Stage One – Gold First

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Stage One First Two Gold Resources to be mined

Strauss and Kylo deposits

- **Indicated Category[1]**
- **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]**

	Gold First PFS[2]
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

** 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

** This includes contingency.
*** Mining cost is an average of $5.19/t of material mined over the life of mine.
**** Includes G&A and Royalty payments.

[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"*

Proposed Funding for Construction

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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.

* 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.

** Tranches One and Two completed

Mt Carrington Exploration – Regional Targets

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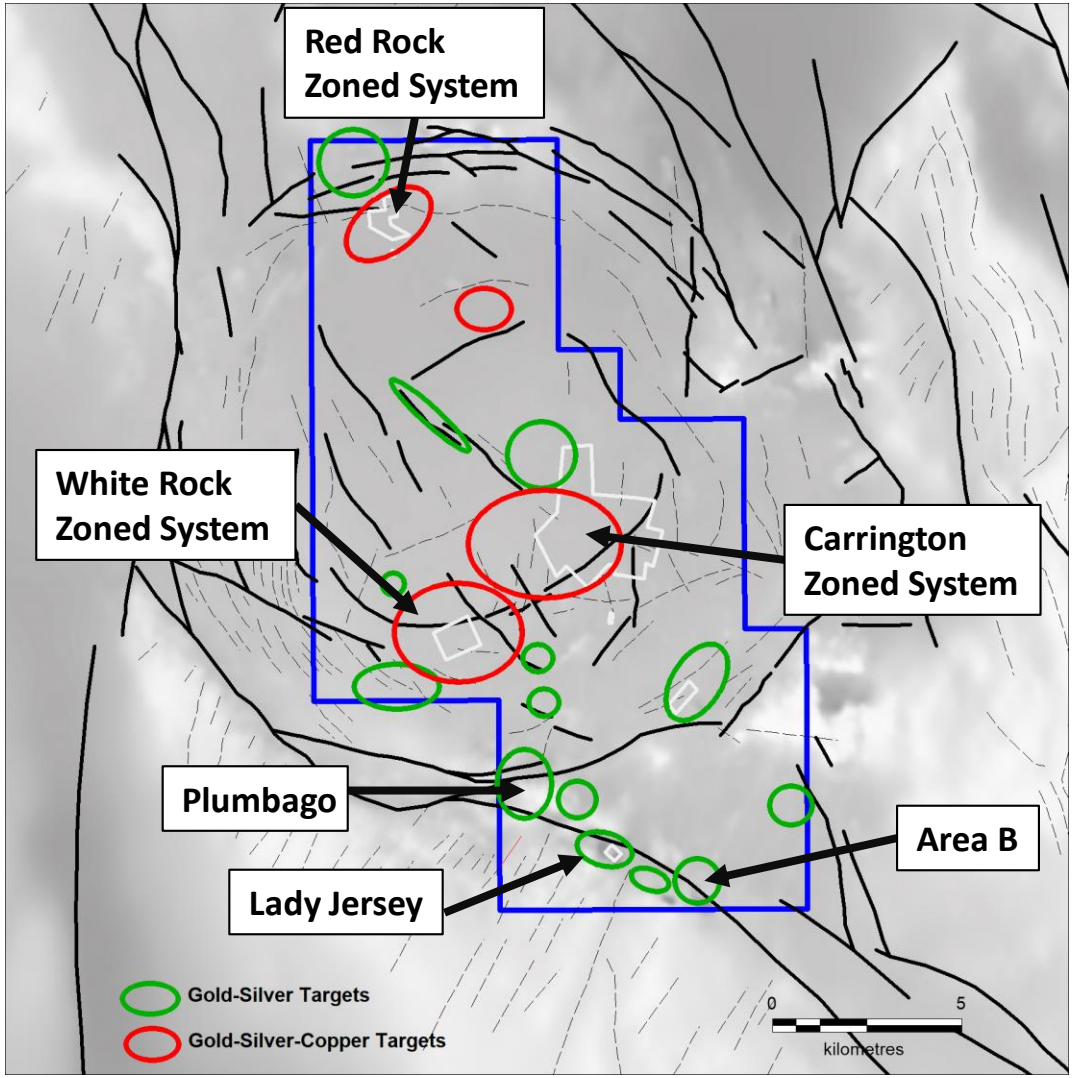

- ✓ **Multiple Regional Targets**
- ✓ **183m² tenure**
- ✓ **Volcanic caldera complex**
- ✓ **Brownfields exploration**
- ✓ **Epithermal Au-Ag**
- ✓ **Zoned Intrusion-related Cu-Au-Ag**

Drake Goldfield contains numerous near surface gold prospects

➢ **Lady Jersey**
Historical high grade production,
Strong gold soil anomalism up to 1g/t Au,
✓ 300m strike potential not drill tested.

➢ **Plumbago**
Strong gold soil anomalism up to 0.7g/t Au,
✓ 200m strike potential not drill tested.

Mt Carrington Exploration - Copper

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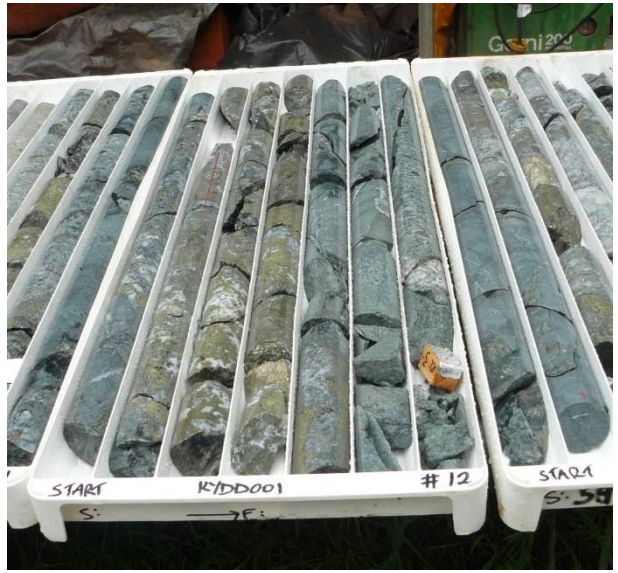
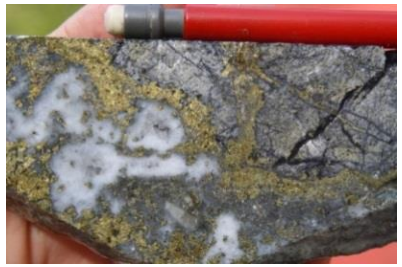
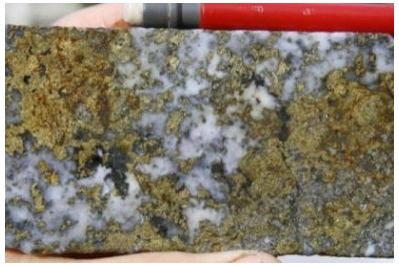


Key Evidence[1]

- Old mine workings and drilling confirms shallow secondary Cu-Au 'leakage'….typically developed above primary copper deposits.
- Drilling confirms discrete high grade Cu – Au 'D' veins on structures….typically associated with upper levels of porphyry Cu systems.
- Strong surface Cu-Au and pathfinder geochemical anomalism.
- Mt Carrington is a very large Au-Ag-Cu alteration system.





1 Refer ASX Announcement 22 September 2014 – "*Mt Carrington Copper Exploration Program*"

Mt Carrington Exploration - Copper

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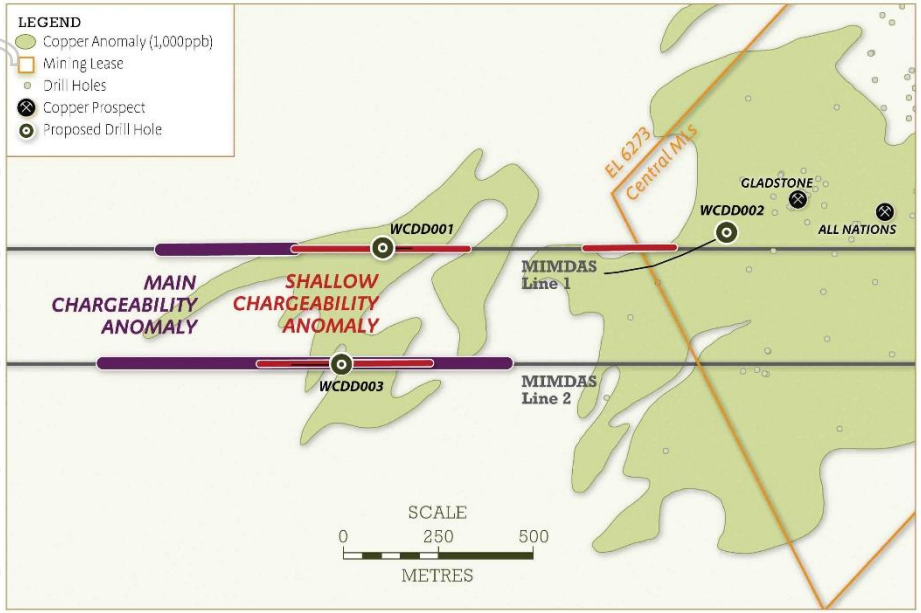

Figure 1: Plan location of the holes drilled with respect to copper soil anomalism and the chargeability anomalies located immediately west of the known Mt Carrington gold-silver deposits and copper prospects.
Note the minimal historic drilling north, west and south of the main chargeability anomaly.

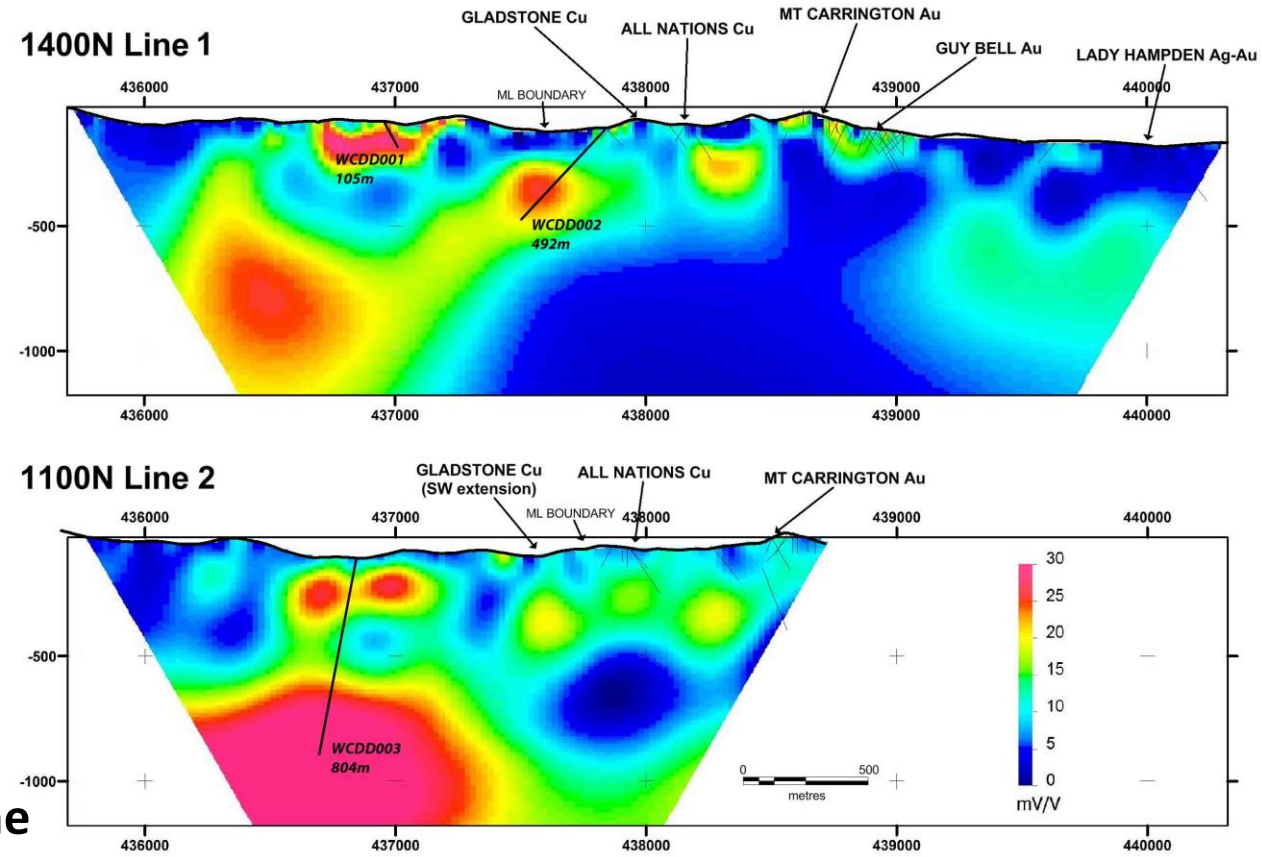

Figure 2: Vertical projection of completed drill holes on MIMDAS IP chargeability cross sections - Line 1 (1400N) and Line 2 (1100N). High chargeable response in pink, low response in blue.

This drilling (3 holes) has defined a large zone of sulphide alteration that extends the system over 2km west of previous known limits, and to a depth of at least 800 metres[1].

1 Refer ASX Announcement 30 June 2015 – "*Extensive Sulphide Alteration Confirmed*"

3. RED MOUNTAIN WORK LOCATION

Red Mtn

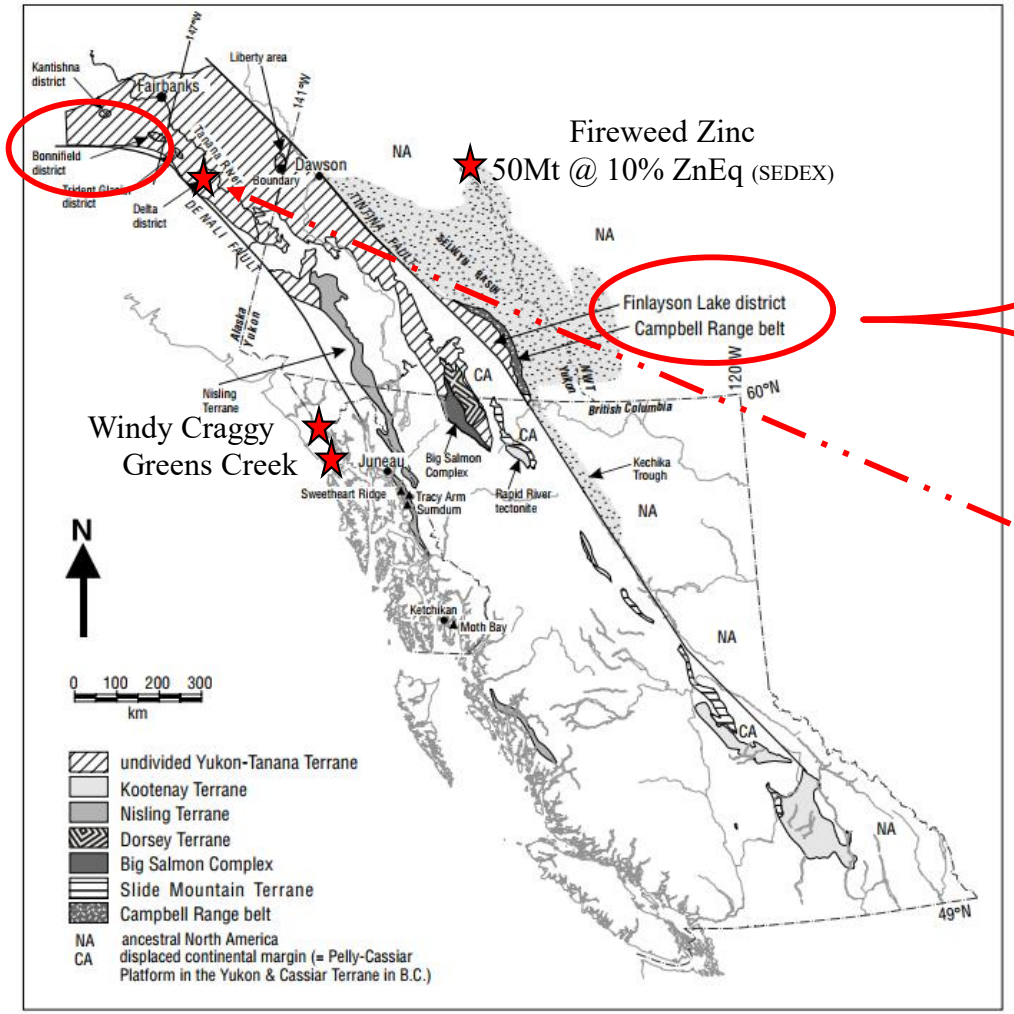

Figure 2. *Distribution of the Yukon-Tanana Terrane, Kootenay, Nisling, Dorsey, and Slide Mountain terranes, Big Salmon Complex and Campbell Range belt. Also shown are the locations of Selwyn Basin, Cassiar terrane (CA) and Ancestral North America (NA). Modified from a figure by Joanne Nelson (written 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[1]:-

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

1.The Red Mountain project hosts JORC estimates of Inferred Mineral Resources – refer cautionary statement on slide 25

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Red Mountain Geology and Mineralisation

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- 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

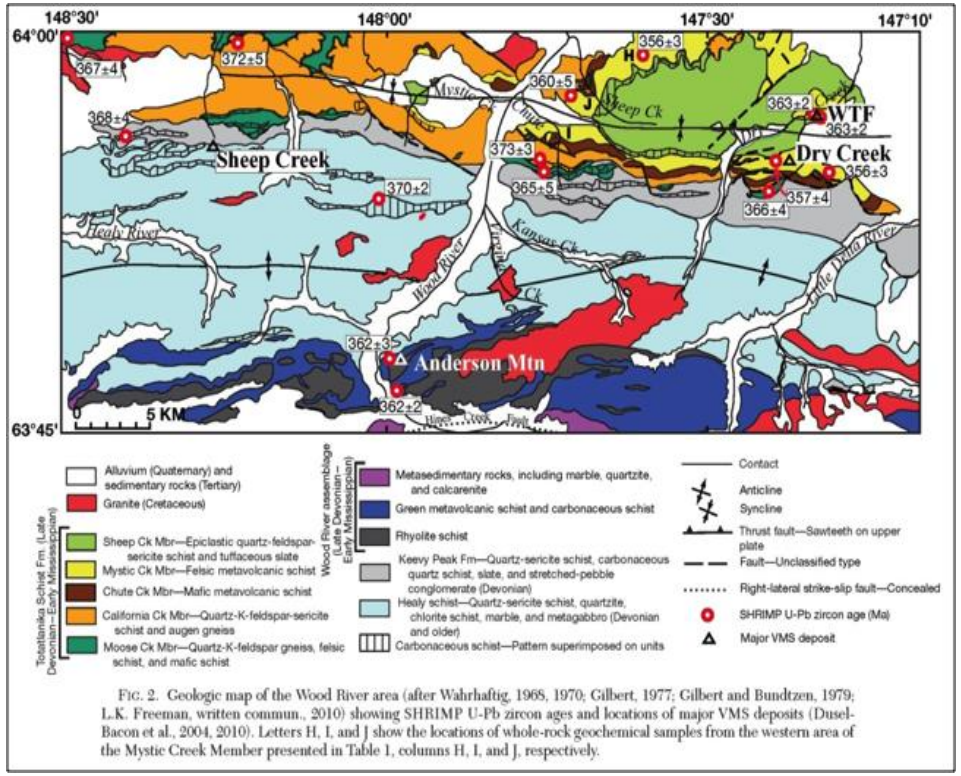

FIG. 2. Geologic map of the Wood River area (after Wahrhaftig, 1968, 1970; Gilbert, 1977; Gilbert and Bundtzen, 1979; L.K. Freeman, written commun., 2010) showing SHRIMP U-Pb zircon ages and locations of major VMS deposits (Dusel-Bacon et al., 2004, 2010). Letters H, I, and J show the locations of whole-rock geochemical samples from the western area of the Mystic Creek Member presented in Table 1, columns H, I, and J, respectively.

✓ 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.

Historic Work – Resource Potential

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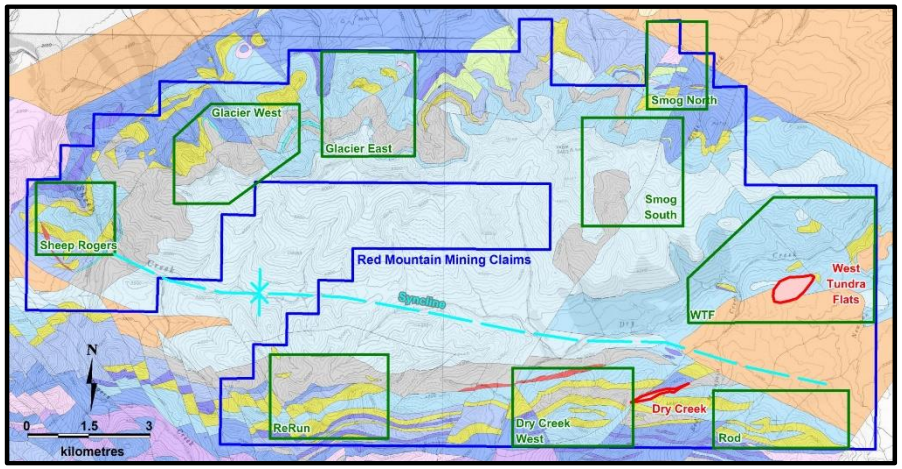
- **Polymetallic VMS project – zinc and silver rich***
- Discovered in 1975 – sulphide outcrop
- Historic exploration from 1975-1999
- Two deposits discovered:
  - Discovery / Fosters (Dry Creek)
  - West Tundra Flats (WTF)
- Mineralisation from surface
- Good preliminary metallurgical test work results with recoveries >90% zinc, >75% lead, >80% gold, >70% Ag
- **475km² land position established – highly prospective.**

Multiple shallow intercepts indicate potential for stacked high-grade lodes

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% 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



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

Historic Drilling

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Drilling at Discovery and Fosters Zones ceased in 1999

Drilling at West Tundra Flats ceased in 1983

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	10.7	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

Multiple shallow intercepts indicate potential for stacked high-grade lodes

Gold and silver intercepts indicate significant co-product potential

Refer to WRM release to the ASX of 15 February 2016