

ASX and Media Release: 17 June 2016

ASX code: WRM



## Response to ASX Query on Historical Estimates for Red Mountain

Replacement Announcements for those made 15 February and 9 June 2016

The Company wishes to advise that in cooperation with the ASX, references to “Historical Estimates” at the Red Mountain Project made in earlier ASX Announcements do not meet the definition of “Historical Estimates” under the ASX Listing Rules. Consequently, the Company retracts the relevant statements and re-issues the attached ASX announcements of 15 February 2016 and 9 June 2016 in line with the ASX Listing Rules.

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## **White Rock Minerals enters into a Heads of Agreement to Acquire the Red Mountain VMS Project in Alaska**

White Rock Minerals Ltd ("White Rock") is pleased to announce that it has entered into a Heads of Agreement in connection with the proposed acquisition of the Red Mountain polymetallic volcanogenic massive sulphide (VMS) project in central Alaska. The proposed acquisition, if implemented, is expected to provide White Rock with a quality advanced exploration project centred on an established VMS district where there is significant potential to discover a new large zinc-silver-lead-gold-copper deposit in addition to the known deposits at Dry Creek and West Tundra Flats.

### **Highlights**

- White Rock has executed a Heads of Agreement relating to a proposal to acquire 100% of Atlas Resources Pty Ltd ("Atlas"), a company that holds an option to acquire a 100% interest in the Red Mountain Project by way of a share for share exchange.
- The Red Mountain Project contains polymetallic VMS mineralisation rich in zinc, silver and lead. Previous exploration has defined mineralisation at the two main prospects (Dry Creek and West Tundra Flats).
- Mineralisation occurs from surface, and is open along strike and down-dip.
- Previous drilling highlights include:
  - Dry Creek**
    - 4.6m @ 23.5% Zn, 531g/t Ag, 8.5% Pb, 1.5g/t Au & 1.0% Cu from 6.1m
    - 5.5m @ 25.9% Zn, 346g/t Ag, 11.7% Pb, 2.5g/t Au & 0.9% Cu from 69.5m
    - 7.1m @ 15.1% Zn, 334g/t Ag, 6.8% Pb, 0.9g/t Au & 0.3% Cu from 39.1m
  - West Tundra Flats**
    - 1.3m @ 21.0% Zn, 796g/t Ag, 9.2% Pb, 10.2g/t Au & 0.6% Cu from 58.6m
    - 3.0m @ 7.3% Zn, 796g/t Ag, 4.3% Pb, 1.1g/t Au & 0.2% Cu from 160.9m
    - 1.7m @ 11.4% Zn, 372g/t Ag, 6.0% Pb, 1.7g/t Au & 0.2% Cu from 104.3m
- Good preliminary metallurgical recoveries of >90% zinc, >70% lead, >80% gold, >70% silver.
- VMS deposits typically occur in clusters ("VMS camps"). Deposit sizes within camps typically follow a normal distribution, and deposits within camps typically occur at regular spacing. The known deposits at Dry Creek and West Tundra Flats provide valuable information with which to vector and target additional new deposits within the Red Mountain camp.
- Interpretation of the geologic setting indicates conditions that enhance the prospectivity for gold-rich mineralisation within the VMS system at Red Mountain. Gold mineralisation is usually found at the top of VMS base metal deposits or adjacent in the overlying sediments. Gold bearing host rocks are commonly not enriched in base metals and consequently often missed during early

exploration sampling. This provides an exciting opportunity for potential further discoveries at Red Mountain.

- White Rock sees significant discovery potential, given the lack of modern day exploration at Red Mountain. This is further enhanced by the very nature of VMS clustering in camps, and the potentially large areas over which these can occur.
- On completion of the proposed transaction with Atlas, White Rock will have an enhanced asset portfolio in commodities (gold, silver and zinc) located in New South Wales and Alaska.
- COO Matt Gill said "White Rock is wonderfully placed given the rise in the Australian gold price to five-year highs. Our Mt Carrington gold – silver project in northern NSW has great leverage to the Australian gold and silver prices, with a A\$100/oz gold price movement increasing the Scoping Study's NPV by some \$7.5Million, or 17% (refer ASX Release 30 September 2015).

Commentators are forecasting a rise in the zinc price due to supply coming out of the market as the large Century and Lisheen mines close. This timely proposed acquisition of Atlas' Red Mountain zinc – silver VMS project, together with the improving Australian gold price, provides the building blocks on which we can seek to increase shareholder value. It is a new beginning for the company".

#### **Heads of Agreement**

Under the terms of the Heads of Agreement, it is proposed that White Rock will acquire all of the shares and options in Atlas. It is intended that the consideration for the acquisition will involve the issue of 1.147 White Rock Shares for every Atlas share, and 1.147 White Rock 5 year options for every Atlas option, exercisable at 3.5 cents per option. Accordingly, if the proposed acquisition proceeds, it is expected that White Rock will issue a total of 63,843,587 new shares to Atlas shareholders and 6,384,359 options to Atlas option holders.

The proposed acquisition is subject to a number of conditions including:

- completion of a capital raising by White Rock to raise a minimum of \$600,000, net of Atlas commitments;
- completion of due diligence by each party to its satisfaction;
- negotiation and execution of definitive transaction documentation including a share purchase agreement;
- White Rock shareholder approval; and
- any regulatory or other approvals required by law or the ASX Listing Rules.

White Rock and Atlas have agreed to work towards entering into definitive documentation to implement the proposed acquisition within a period of 4 weeks, or such later date as the parties agree.

The White Rock shares will remain in trading halt pending a further announcement by the company regarding a proposed capital raising.

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## **THE RED MOUNTAIN PROJECT**

The Red Mountain Project is located in central Alaska, 100km south of Fairbanks, in the Bonnifield Mining District. The tenement package comprises 16 State of Alaska mining claims and 9 leasehold locations over a total area of ~16km<sup>2</sup>, covering the Dry Creek and West Tundra Flats volcanogenic massive sulphide (“VMS”) deposits.

### **Geology**

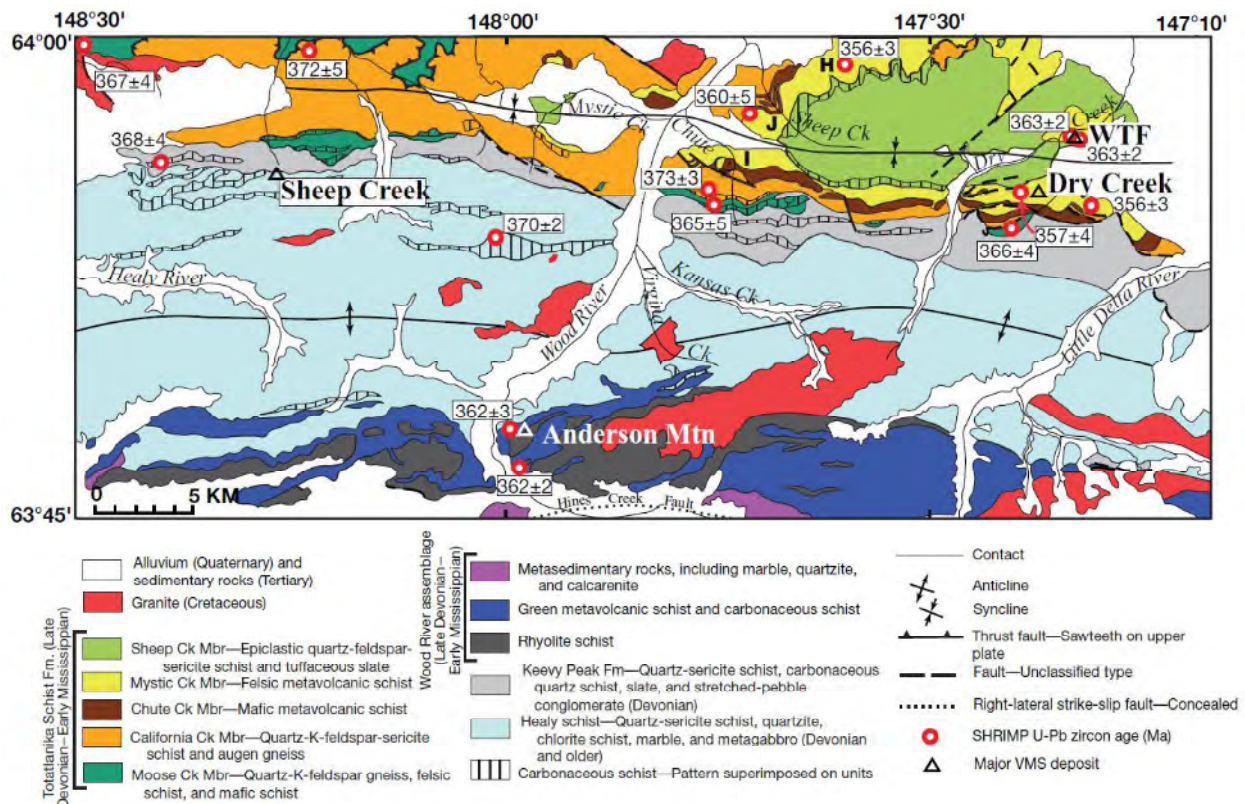
The regional geology consists of an east-west trending schist belt of Precambrian and Palaeozoic meta-sedimentary and volcanic rocks. The schist is intruded by Cretaceous granitic rocks along with Tertiary dykes and plugs of intermediate to mafic composition. Tertiary and Quaternary sedimentary rocks with coal bearing horizons cover portions of the older rocks (Wahrhaftig, 1968). More than a dozen VMS prospects are found within the Bonnifield District. The massive sulphide mineralisation is most commonly located in the upper portions of the Totatlanika Schist which is of Carboniferous to Devonian age. Several gold-quartz vein deposits are also found in the District, associated with metamorphic rocks and felsic dykes within the contact zone of a Cretaceous plutonic complex. Figure 1 illustrates the regional geology and location of major VMS deposits.



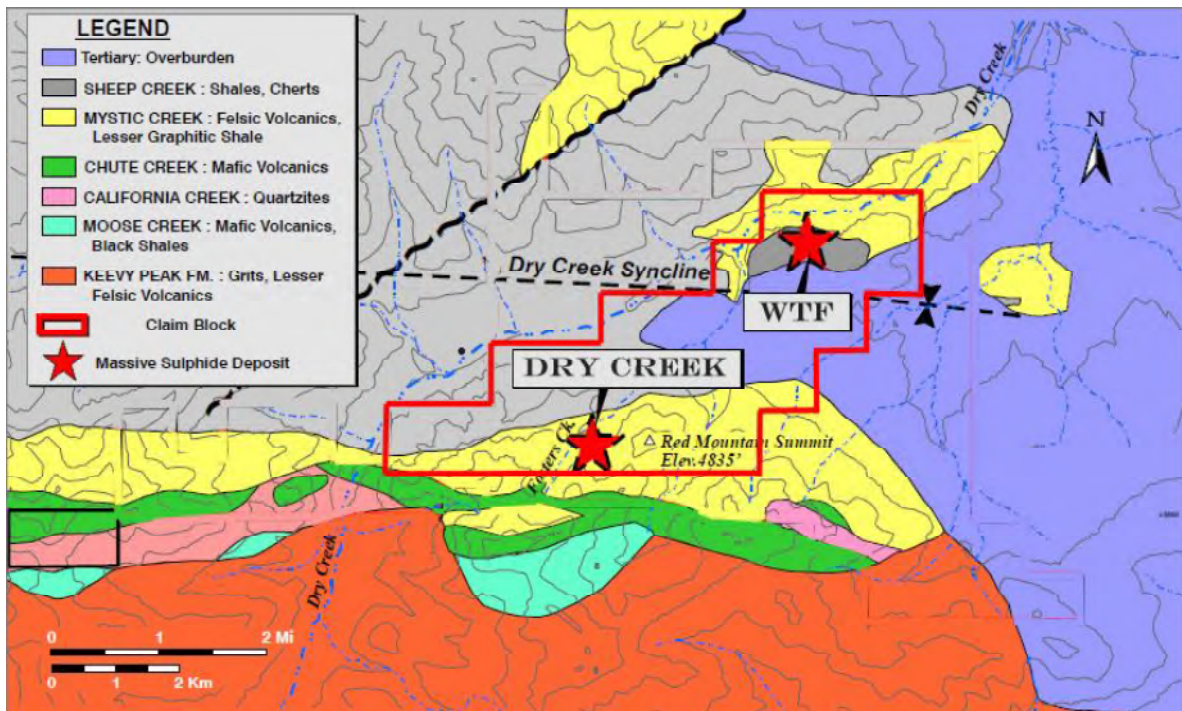
Preliminary analysis of the geologic setting of the Bonnifield District and the Dry Creek and WTF deposits indicates that the Red Mountain Project has the volcanological, geochemical, alteration and sulphide assemblage characteristics of a very shallow water, boiling hydrothermal system. Such conditions enhance the prospectivity for gold-rich systems since gold is transformed into a bisulphide complex that has inverse solubility and is precipitated only on oxidation of the fluid, usually at the top of massive sulphide deposits or in the immediate hangingwall sediments. Conversely, a shallow water setting will suppress the deposition of copper and it is likely that copper will only be a by-product of the deposits with any copper enriched zones likely detached from the remainder of the base metals. Shallow water settings typically also contain VMS mineralisation with relatively low zinc/lead ratios and enriched silver. Additional discoveries in the Bonnifield district are therefore likely to be similarly rich in zinc, lead and silver as the existing deposits at Dry Creek and WTF with good potential for gold rich zones in the tops of the deposits and into the hangingwall.

VMS deposits typically occur as a cluster of deposits (“camps”). Typically, deposits are evenly spaced within a camp. Within almost all camps, deposit sizes are normally distributed. In mature camps this means one “giant” (> 40Mt of ore, 1.8Mt of total base metal: upper 10% of all VMS deposits), two large (>10Mt ore, 550,000 tonnes of base metals: upper 25% of all deposits) and 3-8 small (<3.3Mt ore, 150,000 tonnes of base metal, 50% of all deposits) deposits /occurrences. Typical VMS camps consist of 4-8 deposits, each spaced about 4 to 6 km apart.





**Figure 1:** Geologic map of the Wood River area from Dusel-Bacon et al, 2012 (Economic Geology 107:1403-1432).



**Figure 2:** Geologic map of the Red Mountain project (modified from Grayd internal reports).

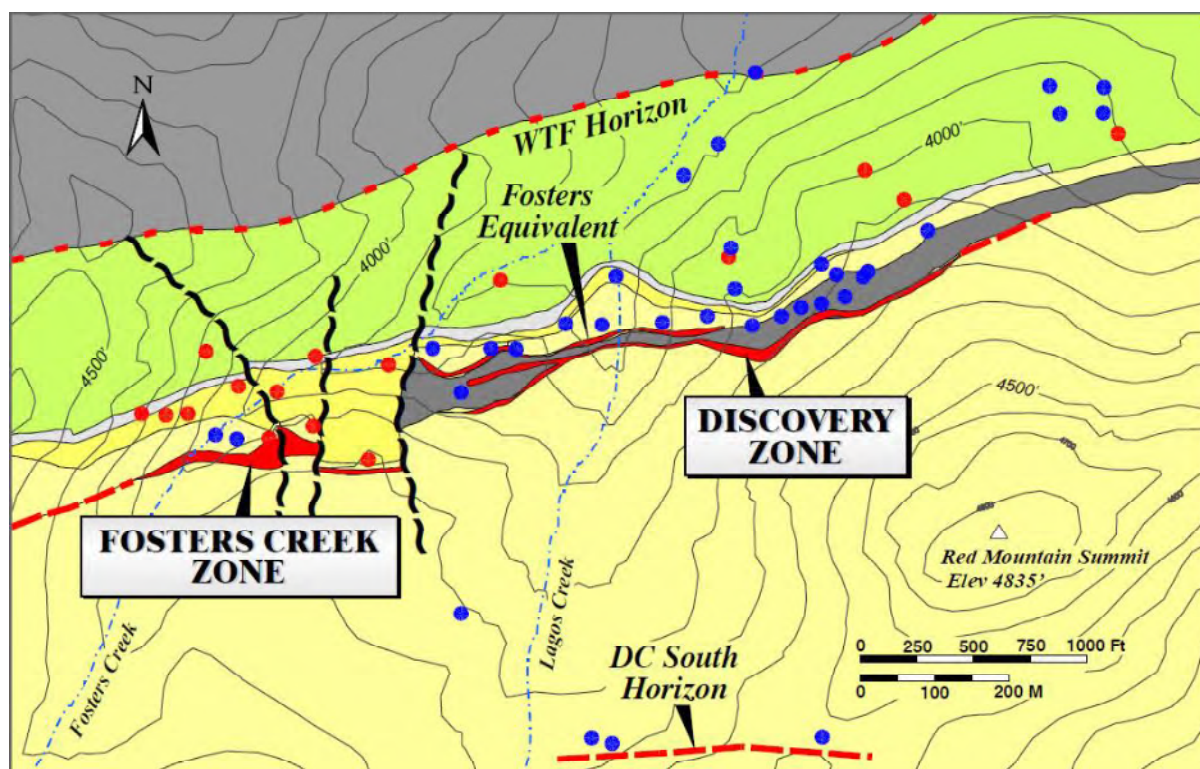
## Mineralisation and Prospectivity

The Red Mountain Project includes the Fosters, Discovery (together referred to as Dry Creek) and West Tundra Flats (WTF) deposits (Figure 2). These are the most prominent occurrences in the Bonnifield District and can be considered a single VMS camp. Elsewhere in the district are the Sheep Creek (45km west) and Anderson Mountain (35km WSW) occurrences (Figure 1), also VMS prospects (no known Resources).

### Dry Creek

At the Dry Creek prospect two horizons containing massive sulphide mineralisation have been found. The DC North Horizon occurs near the upper part of the Mystic Creek and hosts the majority of mineralisation defined to date (Figure 3). The DC South Horizon occurs lower in the section. Both zones dip steeply north.

The DC North Horizon can be traced for 4,500 metres. The central 1,400 metres (on the flanks of Red Mountain) host the Fosters and Discovery deposits. At Discovery, mineralisation occurs as massive to semi-massive zinc-lead-silver rich sulphides within, and at the base of, an aphanitic, intensely quartz-sericite-pyrite altered, siliceous rock termed the “mottled meta-rhyolite”. This mineralization is commonly associated with overlying stringer and disseminated chalcopyrite-pyrite mineralization assaying up to 4.3m @ 6.8% Cu (DC97-14). At Fosters, mineralisation is hosted by a distinctive brown pyritic mudstone unit in the hangingwall of, and along strike from, the “mottled meta-rhyolite”. The mineralisation comprises disseminations and wispy laminations of sulphides and zones of semi-massive to massive sulphides. Sulphides include pyrite, sphalerite, galena and chalcopyrite. Precious metals are typically enriched, especially in the footwall portion of the mineralization.



**Figure 3:** Geologic map of the Dry Creek prospect from Dusel-Bacon et al, 2012 (modified from Grayd internal reports).



Mineralisation at both Fosters and Discovery pinches and swells along strike (Figure 3) and down dip, as is typical of VMS deposits. True width intersections are up to 40 metres at Fosters where there is evidence of growth faults, which typically act as feeders to the VMS system and can be important controls in localising thick ore accumulations. Identifying and targeting such growth faults along the VMS horizon will be an important part of exploration to expand and discover new deposits.

Drill intersection highlights for the both Fosters and Discovery deposits are presented in Table 1 with collar locations and all drill intersections presented in Tables 2 & 3.

Additional observations for enhanced exploration prospectivity at Dry Creek include:

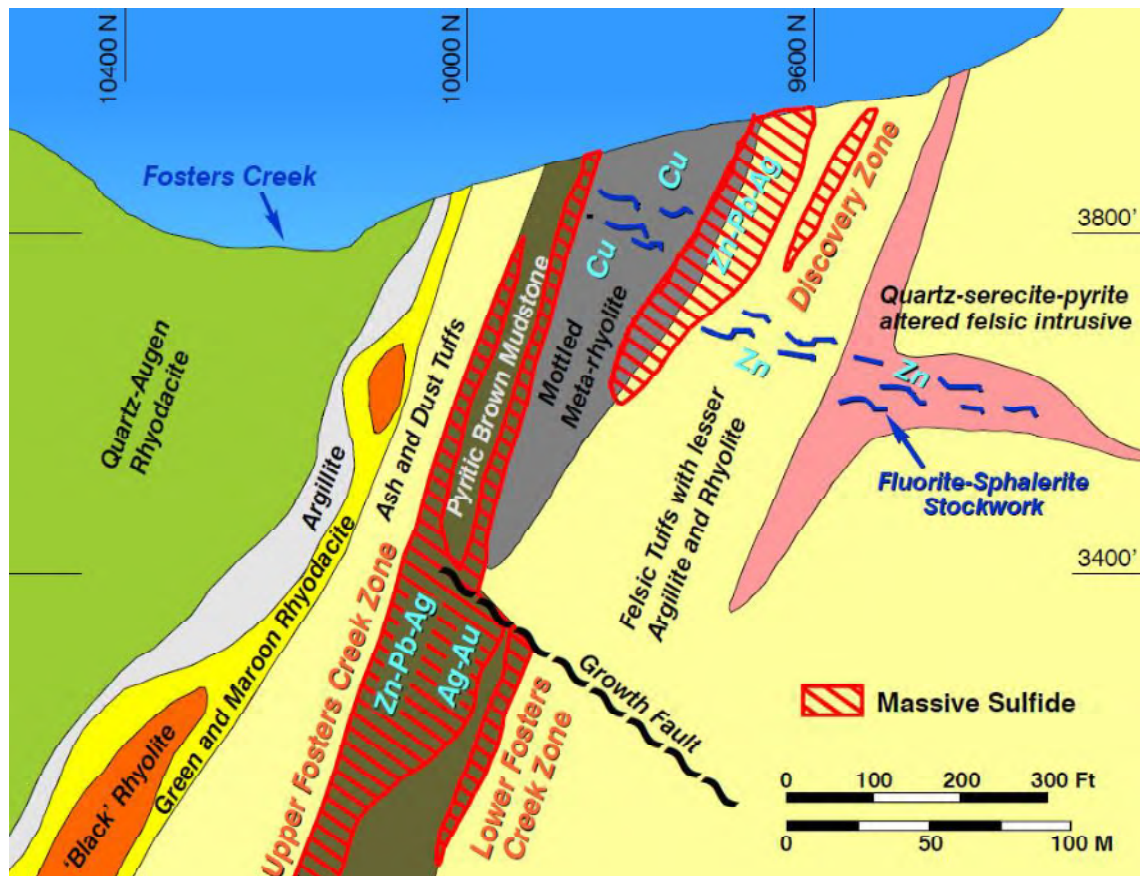
- a. The distribution of massive sulphides as a series of stacked lenses (in part en-echelon) that favour further prospectivity in the hangingwall (eastwards) and footwall (westwards) along strike as well as down dip.
- b. The presence of minor quartz porphyritic felsic intrusions within the growth fault could indicate the presence of a larger felsic intrusion in the footwall. VMS camp prospectivity is enhanced by the presence of large sub-volcanic intrusions thought to be an important heat source in contributing metals and fluid flow to create large VMS camps. In addition, such near paleo-surface intrusions commonly mark discharge structures that may lead to additional deposits.
- c. The copper zone at Discovery indicates significant accumulation of sulphides in that area and therefore prospectivity for higher grades could be enhanced to the northeast rather than southwest.
- d. In general zinc grade increases with depth offering down-dip potential.
- e. Multi-element geochemical analysis of mineralisation and intrusions enriched in fluorite supports the regional observations for a shallow water setting. This enhances prospectivity for high grade gold deposits, particularly in the hangingwall argillite, exhalite and oxidised felsic units. Earlier explorers may not have recognised the gold potential or sampled appropriately since gold mineralisation is often not associated with base metal sulphides.

#### West Tundra Flats

At the West Tundra Flats prospect the mineralized zone occurs at the base of a black chloritic schist unit that is at the base of the sedimentary Sheep Creek Member and at the very top of the metavolcanic Mystic Creek Member. The zone extends at least 850 metres north-south and 850 m east-west. The horizon dips about 15° to the south, is 0.3 to 4.4 m thick and remains open down dip.

Massive sulphide mineralisation is localised in a number of generally narrow exhalative units distinguished by semi-massive and massive sulphides including pyrite, sphalerite and galena. The massive sulphides are commonly rich in silver with erratic gold.

Drill intersection highlights for West Tundra Flats are presented in Table 1 with collar locations and all drill intersections presented in Tables 2 & 3.



**Figure 4:** Schematic cross section for the Dry Creek prospect from Dusel-Bacon et al, 2012 (modified from Grayd internal reports).

Historical geological and geochemical data is less comprehensive than that available for Dry Creek; however the following observations for enhanced exploration prospectivity at WTF can be made:

- Similar gold potential to Dry Creek in the hangingwall sediments and eastern margin of the area.
- Zinc-rich intervals appear clustered towards the southwest presenting down-dip potential (with some indications of increased copper supporting that vector).
- Broad spaced drilling provides upside within the extent of mineralisation for the targeting of growth faults that may locally control thick accumulations of ore.

**Table 1:** Assay highlights from Dry Creek and West Tundra Flats historical drilling.

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

## Historical Work Programs

Mineralisation was discovered in the Red Mountain area in 1975. Subsequent exploration continued in the ensuing years with a number of drill campaigns completed at both the Dry Creek and WTF prospects from 1976 to 1983 by companies including Resource Associates of Alaska Inc. ("RAA"), Getty Mining Company ("Getty"), Phelps Dodge Corporation ("Phelps Dodge") and Houston Oil and Minerals Exploration Company ("HOMEX"). Following a hiatus in exploration drilling, Grayd Resource Corporation ("Grayd") then drilled three campaigns at the Dry Creek prospect over consecutive years from 1996 to 1998. The most recent drill campaign was completed by Atna Resources Ltd ("Atna") in 1999.

Prior to exploration by Grayd the previous companies had drilled a total of 19 holes for 2,416m at Dry Creek and 26 holes for 5,349 metres at WTF. Grayd drilled a total of 68 holes for 8,302m from 1996 to 1998. The most recent campaign completed by Atna (14 holes for 3,114m) tested a number of exploration targets along strike and down dip outside the area of previous drilling at Dry Creek.



Recent desktop work has compiled all the historic drilling into a digital database for future interrogation and verification. The compilation is based on a previous database compiled by Grayd that has been validated from historic hardcopy reports completed by RAA, HOMEX, Grayd and Atna, together with available electronic laboratory reports. Drill collar locations and mineralised intersections for all the drilling are presented in Table 2 and 3.

### **Metallurgy**

In 1998 Grayd commissioned metallurgical test work on a composite sample of drill core intersections from the Fosters deposit. The ore responded well to a traditional flotation scheme producing a bulk lead concentrate and a separate zinc concentrate with excellent metal recoveries.

Zinc recoveries were in excess of 98% of the available zinc. Lead recoveries were approximately 75-80% of the available lead. Silver, copper and gold reported to the lead concentrate. Recoveries of these metals were in the range of 70% to 80%.

The zinc concentrate produced was of very high quality with grades ranging from 58% to 62%. Lead-copper concentrate produced by the test work contained approximately 33% lead, with dilution being primarily due to zinc. An evaluation of this concentrate indicated that the mineralogical makeup of the concentrate was simple, and reagent optimization should be capable of upgrading this concentrate to approximately 50% lead. Results from analysis of the zinc concentrate showed low selenium content at <0.01% and typical cadmium values at 0.15%.

### **Access and Infrastructure**

Access to the Red Mountain project is by a ~20 minute direct flight from Fairbanks via helicopter. Gravel roads extend to within 40 miles of the project area and winter trails can be used to supply freight to the area on a seasonal basis. Elevations range from 750 metres to 1,850 metres ASL over the claim area. The area has excellent infrastructure by Alaskan standards. The town of Healy is located 50 miles to the west on the Parks Highway and is home to a large 30 megawatt coal-fired power plant with rail transportation to ocean ports.

### **Future Work and Funding**

The company is currently undertaking a full compilation and desktop review of the historical exploration data. In conjunction with the data compilation, the company has engaged global VMS expert Dr Jim Franklin to assist with an assessment of the overall potential of the Red Mountain Project. Together these programs will enable the company to publish an Exploration Target in accordance with the JORC Code 2012 and develop drill targets.

Volcanogenic massive sulphide ("VMS") deposits typically occur as a cluster of deposits ("camps"). Typically, deposits are evenly spaced within a camp. Within almost all camps, deposit sizes are normally distributed. The company is attracted to the potential of the Red Mountain Project since two small deposits (Dry Creek and WTF) have already been discovered. The above factors present significant potential for the Red Mountain Project to host additional deposits that are similarly rich in zinc, lead and silver. In addition

there is the potential to add significantly to the known mineralisation at Dry Creek and WTF through extensions along strike, down dip and as stacked lenses.

Preliminary analysis of the geologic setting of the Bonnifield District and the Dry Creek and WTF deposits indicates that the Red Mountain Project has the volcanological, geochemical, alteration and sulphide assemblage characteristics of a very shallow water, boiling hydrothermal system. Such conditions enhance the prospectivity for gold-rich systems since gold is transformed as a bisulphide complex that has inverse solubility and is precipitated only on oxidation of the fluid, usually at the top of massive sulphide deposits or in the immediate hangingwall sediments. Since gold behaves differently to the base metals the gold bearing host rocks are not necessarily enriched in base metals and consequently are often missed during sampling. The gold bearing host rocks are not enriched in base metals and consequently are often missed during sampling.

On the basis of the above the company is also assessing a range of options to fund possible exploration programs that will identify and test for:

1. Gold-rich deposits previously not sampled for or targeted.
2. A large deposit rich in zinc, lead and silver.
3. Additional small deposits.
4. Extensions to known mineralisation.

### **Option Agreement**

Atlas has entered into an Option Agreement with Metallogeny Inc. to acquire 100% of the Red Mountain project from Metallogeny Inc. The key terms of the Option Agreement are:

- 1) The Option is subject to a condition precedent requiring all necessary approvals to the sale and purchase of the Red Mountain Project tenements being obtained prior to 31 March 2016.
- 2) US\$40,000 to exercise the option by 31st March 2016 in exchange for the transfer of tenements to a subsidiary of Atlas.
- 3) Ongoing cash payments totalling US\$950,000 over 5 years:
  - i. US\$50,000 in each of 2016 and 2017
  - ii. US\$100,000 in 2018
  - iii. US\$200,000 in 2019
  - iv. US\$550,000 in 2020
- 4) Exploration expenditure commitments totalling US\$1,200,000 over 4 years:
  - i. US\$100,000 in 2016
  - ii. US\$200,000 in 2017
  - iii. US\$300,000 in 2018
  - iv. US\$600,000 in 2019
- a) A net smelter return royalty payment to Metallogeny of 2% NSR with the option to reduce this to a 1% NSR for US2,000,000.

**Table 2: Collar Locations of Drilling**

Prospect	Hole ID	Easting	Northing	Elevation (m)	Depth (m)	Azimuth	Dip
Dry Creek	DC76-01	480835.4	7087774	1282.5	92.35	180	-60
Dry Creek	DC76-02	481024.1	7088341	1231.7	81.99	170	-45
Dry Creek	DC77-03	480592.5	7088307	1167.9	123.75	160	-45
Dry Creek	DC77-04	480839.1	7088403	1146.4	109.42	160	-45
Dry Creek	DC77-05	481002.5	7088387	1214.5	130.15	160	-60
Dry Creek	DC77-06	481120.6	7087785	1358.9	149.66	160	-45
Dry Creek	DC77-07	480512.4	7087954	1274.2	127.41	160	-45
Dry Creek	DC77-08	481135.1	7088409	1251.7	102.41	150	-70
Dry Creek	DC81-09A	481496.7	7088624	1192.9	87.93	160	-54
Dry Creek	DC81-10	481028.9	7088679	1095.8	153.62	160	-65
Dry Creek	DC81-11	481438.8	7088627	1209	147.22	160	-60
Dry Creek	DC81-12	481493.7	7088804	1111.1	111.86	160	-59
Dry Creek	DC81-13	480932.8	7088542	1117.9	43.28	170	-65
Dry Creek	DC81-13A	480932.8	7088542	1117.9	149.35	170	-67
Dry Creek	DC81-14	481498.2	7088661	1189.7	104.55	160	-65
Dry Creek	DC83-15	481424.5	7088664	1201.2	187.6	160	-50
Dry Creek	DC83-17	480976.7	7088581	1116.8	245.97	160	-50
Dry Creek	DC83-18	481936.5	7088731	1074.9	184.4	180	-50
Dry Creek	DC83-19A	480993.7	7088441	1191	82.6	160	-53
Dry Creek	DC96-1	480962.1	7088352	1217.1	105.77	170	-45
Dry Creek	DC96-1A	480962.1	7088352	1217.1	156.36	172	-70
Dry Creek	DC96-2	480705	7088306	1188.2	138.53	191	-45
Dry Creek	DC96-2A	480705	7088306	1188.2	156.06	192	-70
Dry Creek	DC96-3	480631.3	7088249	1200.4	89.31	180	-45
Dry Creek	DC96-3A	480631.3	7088249	1200.4	116.43	180	-80
Dry Creek	DC96-4	480373.1	7088183	1224.9	44.2	180	-45
Dry Creek	DC97-01	481025.5	7088339	1232.2	131.37	174	-45
Dry Creek	DC97-02	481025.5	7088339	1232.2	106.68	173	-70
Dry Creek	DC97-03	481060.8	7088351	1235	81.99	175	-45
Dry Creek	DC97-04	481060.8	7088351	1235	115.21	176	-70
Dry Creek	DC97-05	480327.6	7088185	1216.2	80.92	177	-45
Dry Creek	DC97-06	480327.6	7088185	1216.2	48.46	170	-65
Dry Creek	DC97-07	481089.9	7088362	1241.2	88.39	170	-45
Dry Creek	DC97-08	481089.9	7088362	1241.2	107.59	171	-67
Dry Creek	DC97-09	481173.9	7088407	1263.2	121.92	140	-45
Dry Creek	DC97-10	481173.9	7088407	1263.2	94.18	180	-45
Dry Creek	DC97-11	480819.3	7088339	1148.4	106.68	181	-45
Dry Creek	DC97-12	480819.3	7088339	1148.4	106.68	188	-70
Dry Creek	DC97-13	481117.2	7088368	1250.5	106.68	170	-45
Dry Creek	DC97-14	481117.2	7088368	1250.5	114.6	170	-70
Dry Creek	DC97-15	481262.6	7088462	1263.4	93.27	180	-45
Dry Creek	DC97-16	481262.6	7088462	1263.4	11.89	189	-70
Dry Creek	DC97-17	481262.6	7088462	1263.4	95.4	185	-65

Prospect	Hole ID	Easting	Northing	Elevation (m)	Depth (m)	Azimuth	Dip
Dry Creek	DC97-18	480630.8	7087949	1255.1	91.74	184	-45
Dry Creek	DC97-19	480630.8	7087949	1255.1	92.66	183	-65
Dry Creek	DC97-20	480788.4	7087652	1316.2	82.6	182	-45
Dry Creek	DC97-21	479755.4	7088020	1450.6	98.76	187	-45
Dry Creek	DC97-22	480853.5	7088646	1118.7	168.86	180	-45
Dry Creek	DC97-23	481148.5	7088378	1259.4	116.74	180	-45
Dry Creek	DC97-24	481148.5	7088378	1259.4	125.43	180	-70
Dry Creek	DC97-25	481116.3	7088423	1240.1	163.37	180	-55
Dry Creek	DC97-26	481116.3	7088423	1240.1	178	180	-70
Dry Creek	DC97-27	481176.8	7088411	1263.7	121.92	180	-70
Dry Creek	DC97-28	480774	7088341	1164.6	104.24	180	-45
Dry Creek	DC97-29	480774	7088341	1164.6	115.52	180	-70
Dry Creek	DC97-30	480903.5	7088343	1186.7	100.28	180	-45
Dry Creek	DC97-31	480903.5	7088343	1186.7	106.07	180	-70
Dry Creek	DC97-32	480297.9	7088188	1216.2	118.87	180	-45
Dry Creek	DC97-33	480297.9	7088188	1216.2	88.7	180	-70
Dry Creek	DC97-34	480670.8	7088308	1185.1	106.68	180	-45
Dry Creek	DC97-35	480670.8	7088308	1185.1	69.95	180	-70
Dry Creek	DC97-36	480814.3	7087783	1275.9	125.88	180	-45
Dry Creek	DC97-37	482011.9	7088636	1082.5	82.6	186	-45
Dry Creek	DC98-38	480263.5	7088201	1234.5	135.94	180	-45
Dry Creek	DC98-39	480263.5	7088201	1234.5	117.96	180	-70
Dry Creek	DC98-40	480373	7088183	1224.9	109.12	180	-45
Dry Creek	DC98-41	480373	7088183	1224.9	99.06	180	-70
Dry Creek	DC98-42	480287.1	7088295	1239.8	198.12	180	-45
Dry Creek	DC98-43	480523.6	7088283	1174.9	178.31	140	-45
Dry Creek	DC98-44	480418.6	7088288	1196.2	193.24	160	-80
Dry Creek	DC98-45	480418.6	7088288	1196.2	109.42	160	-45
Dry Creek	DC98-46	481511	7088621	1187.6	149.35	170	-45
Dry Creek	DC98-47	481511	7088621	1187.6	188.98	170	-70
Dry Creek	DC98-48	481188.6	7088559	1203.1	249.33	180	-45
Dry Creek	DC98-49	480195.7	7088200	1273.9	188.98	180	-50
Dry Creek	DC98-50	480195.7	7088200	1273.9	118.26	180	-70
Dry Creek	DC98-51	480673.5	7088399	1149.5	166.12	180	-45
Dry Creek	DC98-52	480673.5	7088399	1149.5	211.84	180	-70
Dry Creek	DC98-53	480993.7	7088441	1191	219.46	180	-60
Dry Creek	DC98-54	480421.8	7088195	1224.9	106.38	180	-45
Dry Creek	DC98-55	480421.8	7088195	1224.9	51.21	180	-70
Dry Creek	DC98-56	480331.2	7088255	1214	125.58	180	-45
Dry Creek	DC98-57	480331.2	7088255	1214	164.59	180	-60
Dry Creek	DC98-58	481240	7088513	1241.8	213.36	180	-70
Dry Creek	DC98-59	480231.7	7088206	1253.5	140.21	180	-70
Dry Creek	DC98-60	480372.1	7088235	1201.4	91.44	180	-60

Prospect	Hole ID	Easting	Northing	Elevation (m)	Depth (m)	Azimuth	Dip
Dry Creek	DC98-61	480499.7	7088151	1252.4	98.45	180	-45
Dry Creek	DC99-62	481140	7088548	1201.4	209.7	180	-65
Dry Creek	DC99-63	480372.2	7088312	1217.7	144.78	180	-65
Dry Creek	DC99-64	480372.2	7088312	1217.7	163.37	190	-55
Dry Creek	DC99-65	479445.2	7088133	1363.8	207.26	180	-60
Dry Creek	DC99-66	480818.5	7088496	1130.3	237.74	180	-65
Dry Creek	DC99-67	481755.8	7088692	1114.3	216.41	170	-60
Dry Creek	DC99-68	482670.1	7088738	1079.9	146.3	180	-50
Dry Creek	DC99-69	481109.7	7088761	1081.2	393.5	165	-45
Dry Creek	DC99-70	479451.4	7088265	1293	297.18	180	-45
Dry Creek	DC99-71	479608.2	7088084	1404.3	202.39	180	-60
Dry Creek	DC99-72	479917.8	7088337	1310.5	404.16	170	-60
Dry Creek	DC99-73	478577.9	7087797	1441.3	185.93	165	-45
Dry Creek	DC99-74	479932.6	7087786	1348	112.78	180	-55
Dry Creek	DC99-75	480231.5	7088085	1237.7	192.02	170	-60
WTF	DC-16	483678.3	7090188	1005.8	390.45	360	-90
WTF	WTF82-01	484003.2	7091172	941.8	121.31	360	-90
WTF	WTF82-02	484177.4	7091125	944.9	154.53	360	-90
WTF	WTF82-03	484482.1	7091065	999.7	139.9	360	-90
WTF	WTF82-04	484721.1	7091163	990.6	98.76	360	-90
WTF	WTF82-05	484321	7090887	978.4	124.05	360	-90
WTF	WTF82-06	483884	7090997	1011.9	207.57	360	-90
WTF	WTF82-07	483661	7091069	1005.8	221.89	360	-90
WTF	WTF82-08	483945.2	7090856	987.6	252.07	360	-90
WTF	WTF82-09	484312.8	7090719	975.4	189.59	360	-90
WTF	WTF82-10	483667	7090838	999.7	327.66	360	-90
WTF	WTF82-11	483681.3	7090647	999.7	289.56	360	-90
WTF	WTF83-12	483956.4	7090700	978.4	208.76	360	-90
WTF	WTF83-13	484528.5	7090561	951	148.01	360	-90
WTF	WTF83-14	484181.2	7090773	972.3	129.54	360	-90
WTF	WTF83-15	483423.3	7090678	990.6	349.3	360	-90
WTF	WTF83-16	484190.4	7090652	960.1	177.52	360	-90
WTF	WTF83-17	484196	7091006	954	79.67	360	-90
WTF	WTF83-18	484060.6	7090953	981.5	110.95	360	-90
WTF	WTF83-19	484053.6	7090411	966.2	250.55	360	-90
WTF	WTF83-20	483429.7	7090888	987.6	295.05	360	-90
WTF	WTF83-22	484338.6	7090333	941.8	156.91	360	-90
WTF	WTF83-23	484299.8	7090241	929.6	180.59	360	-90
WTF	WTF83-24	483897.5	7090424	960.1	270.36	360	-90
WTF	WTF83-25	483728.4	7090460	990.6	235.61	360	-90
WTF	WTF83-26	484048.8	7090317	938.8	238.35	360	-90



**Table 3:** Assay results from all historical drilling at Dry Creek and West Tundra Flats. (Intercept cut-off grade of 1% Zn, 0.5% Cu; maximum internal dilution of 3m).

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
DC76-01	68.3	71.9	3.7	4.81	5	2.23	NA	0.14
including	68.3	69.2	0.9	14.50	15	8.30	NA	0.50
DC76-02	38.6	50.3	11.6	5.29	112	2.16	NA	0.22
including	41.8	45.4	3.7	9.28	123	3.85	NA	0.27
DC77-03	55.5	59.7	4.3	1.50	17	0.74	NA	0.03
DC77-04	73.2	78.0	4.9	2.29	50	0.75	NA	0.05
DC77-04	89.3	89.6	0.3	2.60	202	1.14	NA	0.08
DC77-05	110.6	113.7	3.0	12.02	108	4.91	0.10	0.10
DC77-06	No significant intersection							
DC77-07	No significant intersection							
DC77-08	79.9	84.4	4.6	0.12	5	0.02	NA	1.02
DC81-09A	72.9	73.8	0.9	0.02	0	0.03	0.03	2.80
DC81-09A	79.2	79.9	0.7	0.02	5	0.02	0.10	1.00
DC81-09A	79.9	87.5	7.6	2.33	1	0.50	0.08	0.03
Including	81.1	82.1	1.0	9.00	0	0.30	0.03	0.02
DC81-10	No significant intersection							
DC81-11	99.1	102.1	3.0	0.02	0	0.02	0.33	1.40
DC81-11	114.8	118.9	4.0	2.24	3	0.65	0.03	0.03
DC81-11	128.0	129.1	1.1	2.65	7	0.96	0.17	0.14
DC81-12	No significant intersection							
DC81-13	No significant intersection							
DC81-13A	No significant intersection							
DC81-14	No significant intersection							
DC83-15	No significant intersection							
DC83-16	358.5	358.9	0.5	0.43	4	0.24	NA	0.01
DC83-17	190.7	191.7	1.0	2.92	4	1.72	NA	0.07
DC83-17	195.1	196.5	1.4	4.45	3	0.03	NA	0.27
DC83-18	No significant intersection							
DC83-19A	No significant intersection							
DC96-1	61.6	62.0	0.5	5.91	152	2.62	0.29	0.13
DC96-1A	75.4	75.6	0.2	0.06	7	0.02	0.01	3.11
DC96-1A	94.2	95.4	1.2	4.48	58	1.37	0.14	0.04
DC96-2	9.4	12.2	2.7	4.85	20	1.90	0.11	0.28
DC96-2	36.9	41.3	4.4	2.63	74	0.98	0.20	0.08
DC96-2	44.8	46.2	1.4	3.81	7	1.54	0.20	0.05
DC96-2	98.9	100.9	2.0	5.94	64	0.07	0.01	0.01
DC96-2A	18.4	23.8	5.3	6.70	13	3.18	0.07	0.60
including	20.0	22.4	2.4	11.12	19	5.54	0.13	0.35
DC96-2A	43.0	44.3	1.3	2.42	3	0.04	0.01	1.35

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
DC96-2A	54.6	57.9	3.4	3.15	38	1.27	0.20	0.08
including	54.6	55.4	0.8	10.46	17	4.04	0.28	0.28
DC96-3	22.4	30.8	8.4	2.33	31	0.65	0.35	0.35
including	22.4	22.6	0.2	2.18	64	1.17	0.03	10.48
including	29.1	30.8	1.7	3.69	101	1.43	0.85	0.05
DC96-3A	34.1	45.1	11.0	1.52	11	0.49	0.11	0.08
including	34.1	34.4	0.3	6.01	12	1.03	0.10	1.38
including	42.7	43.3	0.6	7.47	52	1.87	0.39	0.12
DC96-4	No significant intersection							
DC97-01	41.1	52.4	11.3	7.60	115	3.18	0.99	0.26
DC97-02	67.7	71.6	4.0	4.55	3	0.48	0.03	0.04
DC97-02	75.0	78.2	3.2	2.25	25	0.84	0.33	0.05
DC97-03	36.1	42.8	6.7	6.01	79	2.55	0.57	0.47
including	41.1	42.8	1.7	20.01	266	8.52	1.47	0.62
DC97-03	46.2	46.6	0.5	25.76	264	9.95	2.16	0.32
DC97-03	55.6	57.0	1.4	11.14	218	4.56	0.69	0.75
DC97-04	62.5	75.0	12.5	12.51	160	5.52	1.14	0.71
Including	69.5	75.0	5.5	25.89	346	11.72	2.46	0.88
DC97-05	15.5	22.1	6.6	4.75	104	2.27	0.52	0.13
DC97-06	6.1	7.6	1.5	7.04	77	3.26	0.36	0.17
DC97-06	18.3	20.4	2.1	6.83	292	3.42	0.82	0.15
DC97-07	31.4	37.5	6.1	0.65	19	0.27	0.73	0.53
DC97-07	51.5	51.7	0.2	2.11	26	0.66	0.15	0.07
DC97-08	51.2	56.4	5.2	0.01	3	0.02	0.03	2.16
Including	55.5	56.4	0.9	0.02	8	0.05	0.07	5.77
DC97-08	72.2	78.6	6.4	4.65	57	1.27	0.76	0.64
Including	77.7	78.6	0.9	17.23	228	5.35	2.59	0.59
DC97-08	81.1	82.0	0.9	26.03	321	10.48	3.14	0.72
DC97-09	51.1	51.7	0.6	1.63	1,480	0.63	5.29	0.39
DC97-09	55.5	56.1	0.6	1.31	385	0.62	5.26	0.68
DC97-10	48.8	50.3	1.5	0.02	6	0.02	0.20	1.26
DC97-10	72.2	73.0	0.8	6.96	106	3.80	0.57	0.10
DC97-11	23.2	25.6	2.4	5.79	6	2.70	0.05	0.20
DC97-12	33.2	35.4	2.1	4.95	7	1.58	0.06	0.08
DC97-12	38.7	40.2	1.5	5.96	2	0.04	0.01	0.14
DC97-12	88.4	89.9	1.5	3.34	54	0.13	0.00	0.01
DC97-13	No significant intersection							
DC97-14	57.0	75.3	18.3	1.39	15	0.23	0.24	2.08
Including	59.1	63.4	4.3	0.06	15	0.04	0.04	6.75
including	64.9	73.2	8.2	2.96	10	0.36	0.44	0.59
DC97-14	93.6	97.2	3.7	8.60	156	2.84	0.48	0.19
Including	93.6	94.8	1.2	20.56	374	7.00	0.18	0.38

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
DC97-15	37.8	39.6	1.8	0.03	3	0.01	0.03	0.62
DC97-15	58.7	60.0	1.4	0.11	91	0.05	0.48	0.05
DC97-16	No significant intersection (abandoned)							
DC97-17	57.9	59.7	1.8	0.02	7	0.02	0.04	1.38
DC97-17	69.8	72.8	3.0	2.08	10	0.84	0.04	0.97
DC97-18	No significant intersection							
DC97-19	No significant intersection							
DC97-20	No significant intersection							
DC97-21	No significant intersection							
DC97-22	No significant intersection							
DC97-23	6.4	4.9	- 1.5	0.02	5	0.02	0.13	1.25
DC97-23	37.2	39.6	2.4	2.88	597	1.32	0.54	0.06
DC97-24	12.5	14.2	1.7	0.10	6	0.04	0.03	1.44
DC97-24	67.1	68.0	0.9	6.71	309	2.21	0.01	0.39
DC97-25	88.1	91.4	3.4	1.28	5	0.10	0.04	1.56
DC97-25	96.9	102.7	5.8	0.05	3	0.01	0.04	1.27
DC97-25	112.2	117.5	5.3	2.08	19	0.61	0.57	0.55
DC97-26	128.9	134.4	5.5	0.02	4	0.01	0.04	2.49
DC97-26	141.4	144.2	2.7	5.03	15	0.39	0.34	0.49
DC97-26	145.4	147.4	2.0	4.55	63	1.33	2.78	0.21
DC97-26	148.3	150.1	1.8	9.09	136	3.41	1.37	0.11
including	149.4	150.1	0.8	18.49	266	6.95	2.88	0.20
DC97-27	83.1	84.7	1.7	0.03	6	0.02	0.07	2.77
DC97-27	96.6	101.0	4.4	2.09	30	0.85	0.18	0.31
DC97-28	39.2	40.1	0.9	5.34	5	0.89	0.05	0.34
DC97-28	50.9	51.8	0.9	2.18	5	0.70	0.07	1.13
DC97-29	50.9	57.3	6.4	3.38	4	0.77	0.01	0.75
DC97-29	60.8	61.4	0.6	4.00	3	0.25	0.00	1.10
DC97-30	13.4	26.1	12.6	2.78	123	1.35	0.49	0.12
including	17.7	20.9	3.2	9.19	226	4.72	1.16	0.41
DC97-30	53.6	54.6	0.9	3.27	68	1.45	0.16	0.17
DC97-31	29.0	31.4	2.4	12.72	1,061	6.45	3.82	0.35
DC97-31	55.8	56.8	1.1	0.01	3	0.01	0.01	1.39
DC97-32	27.9	33.9	6.1	14.43	137	6.83	0.61	0.36
including	30.3	33.4	3.1	20.08	169	9.52	0.78	0.52
DC97-33	39.1	46.2	7.1	15.12	334	6.81	0.86	0.30
DC97-34	8.2	9.6	1.4	10.00	67	2.07	0.28	0.18
DC97-34	30.6	31.1	0.5	1.36	37	0.02	0.02	9.03
DC97-34	47.4	51.5	4.1	2.60	5	0.86	0.26	0.08
DC97-34	53.8	54.6	0.8	6.14	28	2.53	0.39	0.55
DC97-34	65.5	68.6	3.0	2.04	282	0.82	1.39	0.06
DC97-35	13.4	15.5	2.1	6.77	13	3.26	0.10	0.21

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
DC97-35	16.8	18.3	1.5	2.25	1	0.06	0.02	0.09
DC97-35	48.2	51.2	3.0	2.40	1	0.02	0.01	0.04
DC97-35	56.7	58.2	1.5	4.42	3	0.44	0.18	0.01
DC97-36	46.4	59.7	13.3	2.78	2	0.54	0.00	0.09
Including	57.9	58.9	1.1	15.64	5	1.74	0.02	0.32
DC97-37	No significant intersection							
DC98-38	59.0	68.0	9.0	5.40	269	2.43	1.00	0.15
Including	61.5	63.8	2.3	13.24	581	5.82	3.07	0.30
DC98-39	77.6	98.8	21.2	6.99	57	3.20	0.38	0.19
Including	77.6	89.0	11.4	10.38	56	4.78	0.51	0.28
with	77.6	82.6	5.0	17.74	64	7.80	0.45	0.45
DC98-40	6.1	42.2	36.1	6.24	183	2.56	1.03	0.22
Including	6.1	10.7	4.6	23.54	531	8.45	1.53	1.02
and	21.3	24.5	3.1	14.65	211	6.65	0.53	0.25
DC98-41	No significant intersection (zone faulted)							
DC98-42	167.6	174.5	6.9	1.52	81	0.76	0.36	0.05
DC98-43	59.0	60.5	1.5	1.51	5	0.63	0.08	0.02
DC98-44	104.2	105.6	1.3	5.99	6	1.04	0.00	0.16
DC98-44	109.3	126.8	17.5	1.68	31	0.71	0.08	0.06
Including	109.3	111.6	2.3	4.06	107	1.85	0.23	0.15
DC98-45	97.5	102.1	4.6	1.58	28	0.52	0.19	0.04
DC98-46	56.7	64.0	7.3	0.04	3	0.02	0.04	0.53
including	62.8	64.0	1.2	0.02	4	0.01	0.10	1.50
DC98-46	68.9	80.9	12.0	2.35	1	0.52	0.02	0.06
including	70.1	72.6	2.5	8.16	2	1.28	0.02	0.19
DC98-47	124.4	128.3	4.0	2.04	4	0.85	0.03	0.05
DC98-48	141.4	142.7	1.3	0.01	3	0.01	0.02	1.60
DC98-48	167.6	168.3	0.7	0.15	5	0.01	0.03	2.60
DC98-48	178.0	180.4	2.4	2.52	27	1.06	0.25	0.16
DC98-49	No significant intersection							
DC98-50	115.5	118.3	2.7	2.05	61	0.97	0.25	0.05
DC98-51	106.4	107.9	1.5	2.39	2	0.43	0.01	0.04
DC98-51	128.0	132.6	4.6	2.41	17	1.29	0.13	0.06
DC98-52	118.0	123.3	5.3	2.82	147	1.22	0.25	0.07
including	122.7	123.3	0.6	10.67	691	5.43	1.68	0.22
DC98-52	136.1	142.0	5.9	3.59	25	1.58	0.07	0.09
DC98-52	142.8	147.9	5.2	3.84	11	1.88	0.11	0.12
DC98-53	96.0	97.5	1.5	2.01	19	0.73	0.11	0.02
DC98-53	104.5	108.8	4.3	2.97	19	1.28	0.13	0.05
DC98-53	144.8	145.4	0.6	2.18	10	1.67	0.13	0.09
DC98-53	151.2	151.8	0.6	2.50	7	0.66	0.01	0.16

HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
DC98-54	19.8	27.9	8.1	3.22	22	1.47	0.27	0.08
Including	23.5	25.9	2.4	6.67	40	3.38	0.60	0.15
DC98-55	21.3	36.6	15.2	2.84	8	0.62	0.26	0.04
DC98-55	50.0	51.2	1.2	2.26	14	0.70	0.08	0.02
DC98-56	51.2	52.4	1.2	2.02	19	0.89	0.14	0.05
DC98-56	54.9	56.1	1.2	2.84	11	0.79	0.02	0.03
DC98-56	69.8	71.0	1.2	4.13	12	1.76	0.04	0.09
DC98-56	76.2	96.9	20.7	3.25	84	1.70	0.37	0.09
Including	77.4	81.1	3.7	9.81	18	5.91	0.37	0.28
DC98-57	83.1	85.3	2.3	2.73	97	1.16	0.39	0.06
DC98-57	106.7	112.2	5.5	2.99	9	1.41	0.14	0.06
DC98-58	128.0	135.6	7.6	1.67	14	0.68	0.14	0.15
DC98-58	135.6	140.2	4.6	0.13	3	0.02	0.04	1.39
DC98-58	163.1	176.8	13.7	3.15	29	1.24	0.17	0.13
Including	166.1	167.3	1.2	10.73	47	2.65	0.20	0.14
DC98-59	104.5	116.4	11.9	2.96	92	1.41	0.41	0.10
DC98-59	121.0	125.6	4.6	1.95	47	0.85	0.25	0.04
DC98-60	17.6	86.5	68.9	4.02	58	1.88	0.36	0.10
Including	21.2	30.8	9.6	6.46	23	3.08	0.26	0.15
Including	36.0	41.1	5.1	8.53	17	4.38	0.23	0.13
Including	53.8	58.8	4.9	10.17	86	4.96	0.39	0.28
Including	80.8	81.1	0.3	11.53	429	5.57	0.33	0.28
DC98-61	39.6	42.1	2.4	4.10	54	1.45	0.41	0.11
DC99-62	201.3	204.8	3.5	2.34	144	0.71	0.29	0.05
DC99-63	143.0	144.8	1.8	1.94	9	0.98	0.09	0.05
DC99-64	141.1	151.2	10.1	4.30	24	1.54	0.20	0.17
DC99-65	149.7	152.4	2.7	5.57	96	2.77	0.33	0.10
DC99-66	164.9	165.8	0.9	2.03	154	0.72	0.20	0.06
DC99-66	170.1	187.1	17.1	2.08	4	0.77	0.06	0.07
Including	181.7	182.6	0.9	8.07	4	1.34	0.01	0.27
DC99-67	No significant intersection							
DC99-68	No significant intersection (zone faulted)							
DC99-69	304.8	306.3	1.5	3.70	12	0.72	0.06	
DC99-69	364.2	368.5	4.3	2.49	4	0.55	0.02	
DC99-70	No significant intersection							
DC99-71	No significant intersection							
DC99-72	No significant intersection							
DC99-73	112.3	112.8	0.5	2.35	123	0.74	0.05	0.12
DC99-74	36.0	36.9	0.9	2.40	8	1.66	0.02	0.33
DC99-75	No significant intersection							
WTF82-01	83.5	87.5	4.0	1.43	25	0.40	0.25	0.02
including	83.5	83.9	0.3	5.41	240	2.88	0.82	0.04



HOLE ID	From (m)	To (m)	Interval (m)	Zn %	Ag g/t	Pb %	Au g/t	Cu %
<b>WTF82-02</b>	24.0	29.6	5.5	3.58	46	1.07	0.50	0.03
including	25.7	26.5	0.9	13.70	148	6.11	2.02	0.05
and	28.3	29.6	1.2	5.59	96	0.27	0.72	0.05
<b>WTF82-03</b>	72.2	75.3	3.0	5.34	106	2.40	0.95	0.05
including	73.2	74.1	0.9	12.90	235	5.75	2.19	0.12
<b>WTF82-04</b>	No significant intersection							
<b>WTF82-05</b>	104.3	106.1	1.7	11.40	374	5.97	1.71	0.15
<b>WTF82-06</b>	167.0	173.0	6.0	2.67	28	0.66	0.15	0.04
including	172.4	173.0	0.6	8.79	178	2.76	0.91	0.06
<b>WTF82-07</b>	193.5	196.0	2.4	1.82	12	0.23	0.03	0.08
<b>WTF82-08</b>	160.9	164.0	3.0	7.28	796	4.27	1.12	0.17
<b>WTF82-09</b>	138.3	138.6	0.3	14.30	675	6.63	3.43	0.22
<b>WTF82-10</b>	240.2	242.5	2.3	6.24	79	1.97	0.26	0.07
Including	240.2	241.5	1.3	10.12	139	3.53	0.46	0.11
<b>WTF82-11</b>	235.0	240.7	5.7	1.89	33	0.87	0.26	0.01
Including	239.9	240.7	0.8	8.97	169	4.84	0.34	0.02
<b>WTF82-12</b>	No significant intersection							
<b>WTF82-13</b>	No significant intersection							
<b>WTF83-14</b>	117.7	119.5	1.8	8.33	248	3.49	1.30	0.16
Including	117.9	119.1	1.2	11.48	351	4.80	1.84	0.18
<b>WTF83-15</b>	No significant intersection							
<b>WTF83-16</b>	164.1	169.5	5.4	4.05	156	1.74	0.82	0.19
Including	168.1	169.5	1.4	8.70	397	3.88	1.86	0.36
<b>WTF83-17</b>	58.6	59.9	1.3	20.92	796	9.17	10.22	0.56
<b>WTF83-18</b>	96.5	97.1	0.7	7.50	243	4.30	0.17	0.07
<b>WTF83-19</b>	222.2	222.5	0.3	19.00	614	11.50	3.43	0.25
<b>WTF83-20</b>	No significant intersection							
<b>WTF83-21</b>	No significant intersection							
<b>WTF83-22</b>	No significant intersection							
<b>WTF83-23</b>	No significant intersection							
<b>WTF83-24</b>	249.7	250.4	0.7	6.19	123	3.27	NA	0.20
<b>WTF83-25</b>	210.6	211.2	0.6	19.50	192	4.50	2.16	0.18
<b>WTF83-26</b>	225.9	226.1	0.3	14.50	528	6.50	1.78	0.17

#### Competent Persons Statement

The information in this report that relates to exploration results is based on information compiled by Mr Rohan Worland who is a Member of the Australian Institute of Geoscientists and is a consultant to White Rock Minerals Ltd. Mr Worland has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Worland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## APPENDIX 1

### Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was diamond core from surface.</li> <li>The majority of sampling is at 0.3 to 2.0m intervals for mineralisation. Minor pre-1996 sampling was at greater intervals where samples were only weakly mineralised. Several samples from 1999 extended up to 20m intervals where mineralisation was not apparent. Sample intervals were determined by geological characteristics.</li> <li>The majority of core was split in half by core saw for external laboratory preparation and analysis.</li> <li>Based on the distribution of mineralisation the sample size is considered adequate for representative sampling.</li> <li>No records of sampling accuracy and representativeness have been compiled to date.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul style="list-style-type: none"> <li>All drilling was diamond core from surface. The diameter is not yet known from compilations to date although it is assumed the majority is NQ standard tube.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<ul style="list-style-type: none"> <li>Core recovery has been recorded on paper drill logs but not in digital form.</li> <li>A link between sample recovery and grade is not apparent.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Paper logs have been retrieved for all drilling except the 1983 drill holes at the WTF prospect.</li> <li>No core photography exists.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>The majority of diamond core was split in half by core saw. Some drilling from 1999 sampled core intervals &gt;2m by representative chips where mineralisation was not apparent.</li> <li>No other information about sample preparation has been compiled to date.</li> <li>No QAQC information has been compiled to date. There is evidence of routine standards for the Grayd drilling (1996 to 1998) at an interval of 1 in 20 samples. Laboratory duplicates and triplicates are evident on assay reports. No analysis of this data has yet been completed.</li> </ul>

Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>Grayd drill samples (1996-1998) were analysed by ACME. Atna drill samples (1999) were analysed by Chemex. No laboratory information for other samples has been compiled to date. Drilling completed prior to 1996 utilised a combination of in-house laboratories (Resource Associates of Alaska Inc.) and commercial laboratories including Rainbow, ACME, Chemex and Hazen. The type of analysis and digest has not yet been determined from the historical records.</li> <li>No QAQC information has been compiled to date. There is evidence of routine standards for the Grayd drilling (1996 to 1998) at an interval of 1 in 20 samples. Laboratory duplicates and triplicates are evident on assay reports. No analysis of this data has yet been completed.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>The original digital assay database from Grayd has been checked and verified against laboratory reports and original paper drill logs where they exist.</li> <li>One twin hole on was completed by Grayd (DC97-01 versus DC76-02). Results show close spatial and grade correlation.</li> <li>All data has been compiled by Northern Associates, Inc., an Alaskan based geological services company.</li> <li>No adjustment to assay data is undertaken.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>All diamond drill holes were located in local grid co-ordinates. No information has been compiled to provide detail as to the accuracy of the local grid or accuracy of the transformation to the NAD27 datum.</li> <li>Topographic control is provided by a high resolution IFSAR DEM (high resolution radar digital elevation model) acquired in 2015. Accuracy of the DEM is <math>\pm 2\text{m}</math>. Accuracy of the drill hole collars is limited by the assumption that the surface location in NAD27 datum is accurate.</li> <li>Evidence of systematic downhole surveys has not been located.</li> <li>All coordinates are quoted in UTM (NAD27 for Alaska Zone 6 datum).</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Data spacing (drill holes) is variable and appropriate to the geology.</li> <li>Sample compositing is not applicable in reporting exploration results.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul style="list-style-type: none"> <li>No significant orientation based sampling bias is known at this time.</li> <li>Mineralisation is dominantly orientated parallel to bedding.</li> <li>The drill holes may not necessarily be perpendicular to the orientation of the intersected mineralisation.</li> <li>Reported intersections are down-hole intervals and not true widths.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>No records of sample security have been compiled to date.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No records of any audits or reviews of sampling have been compiled to date.</li> </ul>

## APPENDIX 2

### Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<ul style="list-style-type: none"> <li>The Red Mountain Project comprises 16 mining locations and 9 leasehold locations in the State of Alaska ('the Tenements').</li> <li>4 mining locations and 2 leasehold locations are 100% vested in Metallogeny, Inc.</li> <li>12 mining locations and 7 leasehold locations are 100% vested in or held by Mary Wikander for Metallogeny, Inc.</li> <li>Atlas Resources Pty Ltd ('Atlas') have an Option Agreement with Metallogeny, Inc. and Mary Wikander to acquire 100% of the Tenements.</li> <li>White Rock Minerals Ltd has a Heads of Agreement to acquire 100% of Atlas.</li> <li>The exploration results reported here are historical results from work that is located on RM1, RM2, RM3, RM4, RM5, RM6, RM7, RM8, RM9, RM10, RM11, RM12, RM13, RM14, RM15, RM16, RM17, RM18, RM19, RED MOUNTAIN 32NE, RED MOUNTAIN 29SE, REDMOUNTAIN 28SW, RED MOUNTAIN 28NE, RED MOUNTAIN 22SW and RED MOUNTAIN 22SE.</li> <li>All of the Tenements are current and in good standing.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>The Red Mountain project has seen significant exploration conducted by Resource Associates of Alaska Inc. ("RAA"), Getty Mining Company ("Getty"), Phelps Dodge Corporation ("Phelps Dodge"), Houston Oil and Minerals Exploration Company ("HOMEX"), Grayd Resource Corporation ("Grayd") and Atna Resources Ltd ("Atna"). The Exploration Results presented here are a compilation of the historical drilling completed by these explorers.</li> <li>All historical work has been reviewed, appraised and integrated into a database and is of sufficient quality, relevance and applicability to be reported here.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>Volcanogenic massive sulphide ("VMS") mineralisation located in the Bonnifield District, located in the western extension of the Yukon Tanana terrane.</li> <li>The regional geology consists of an east-west trending schist belt of Precambrian and Palaeozoic meta-sedimentary and volcanic rocks. The schist is intruded by Cretaceous granitic rocks along with Tertiary dikes and plugs of intermediate to mafic composition. Tertiary and Quaternary sedimentary rocks with coal bearing horizons cover portions of the older rocks. The VMS mineralisation is most commonly located in the upper portions of the Totatlanika Schist which is of Carboniferous to Devonian age.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>See Table 3 for location details of all drill holes in this report.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> </ul>	<ul style="list-style-type: none"> <li>All Exploration Results reported are downhole weighted means.</li> <li>Table 4 summarises significant intercepts with a minimum grade of 1% Zn and 0.5% Cu, with a maximum internal dilution of 3 metres. Assay results outside these</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>reporting criteria are deemed to be too low to be of any Material significance and the exclusion of this information does not detract from the understanding of the report.</p> <ul style="list-style-type: none"> <li>No top cut is applied to Exploration Results.</li> <li>Zinc equivalent values are based on long-term Bloomberg Consensus Estimates (median prices) as at 3 February 2016 of Zn US\$0.90/lb, Pb US\$0.87/lb, Cu US\$2.47/lb, Au US\$1,175/oz, Ag US\$17.50/oz, and do not take into account relative recoveries.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The geometry of mineralisation zones at Dry Creek is steep towards the north. The geometry of mineralisation zones at WTF is shallow towards the southwest. Insufficient interpretation and 3D modelling has been completed to convert downhole widths to true widths at this stage.</li> <li>All mineralisation intercepts for Exploration Results are presented as down hole lengths.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps, sections and tables are included in the body of the report.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration results report intercepts with a minimum grade of 1% Zn and 0.5% Cu, with a maximum internal dilution of 3 metres. Assay results outside these reporting criteria are deemed to be too low to be of any Material significance and the exclusion of this information does not detract from the understanding of the report.</li> <li>Drill holes with results that do not meet these criteria are noted to avoid misinterpretation.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul style="list-style-type: none"> <li>Other historical exploration data has not yet been compiled to a level where it can be reported. Further compilation of such data will be reviewed and reported when considered material.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Planned future work is outlined in the body of the report.</li> </ul>



ASX and Media Release: 9 June 2016

ASX Code: WRM



## White Rock commences exploration activities to generate new zinc targets at its Red Mountain Project

**ASX Code: WRM**

**Issued Securities**

Shares: 401.8 million

Options: 17.6 million

**Cash on hand (31 Mar 2016)**

\$0.6M

**Market Cap (16 May 2016)**

\$7.2M at \$0.018 per share

**Directors & Management**

Brian Phillips

Non-Executive Chairman

Geoffrey Lowe

Non-Executive Director

Peter Lester

Non-Executive Director

Matthew Gill

Chief Executive Officer

Shane Turner

Company Secretary

Rohan Worland

Exploration Manager

**For further information contact:**

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White Rock Minerals ("White Rock") is pleased to announce that it has commenced compiling historical surface geochemical and geophysical surveys in order to define new high-grade zinc – silver exploration targets. This follows the decision to exercise the option to acquire the Red Mountain Project in Alaska.

Red Mountain is a quality advanced exploration project centred on an established volcanogenic massive sulphide ("VMS") district where there is significant potential to discover a new large zinc-silver-lead-gold-copper deposit in addition to the known zinc-silver-lead-gold deposits at Dry Creek and West Tundra Flats (ASX Announcement 15 February 2016).

Historical explorers and the Alaskan Division of Geological and Geophysical Surveys (DGGS) have completed numerous surface geochemical and geophysical surveys in the district, including the 71km<sup>2</sup> tenement package currently held by White Rock. In addition, the DGGS completed an airborne electromagnetics and magnetics survey in 2007, after previous explorers ceased work in 1999.

White Rock has commenced the first multi-disciplinary compilation of all available data sources of this district, combined with an interrogation and interpretation of the data. This body of work will use the power of modern vector analysis and 3D processing and will be directed towards defining a combination of targets, including specific extensions to the known mineralisation as well as district wide targets that could represent additional zinc – silver deposits in the Red Mountain VMS camp.

Dr Jim Franklin, a recognised global VMS expert, has been engaged to assist in the assessment of the data, particularly with regard to using modern vector analysis of the geochemical data to identify new exploration targets.

Condor Consulting, Inc., recognised experts in the field of airborne electromagnetics, has been retained to perform a detailed interpretation of the electromagnetics and magnetics surveys.

White Rock anticipates that this work will provide a pipeline of targets for further field work in the coming months. And in turn this work will define targets for drill testing.

CEO Matt Gill said "We are wasting no time in advancing the Red Mountain Project by using the extensive historical data to define new drill targets that can be tested in the near term. Using a combination of industry leading experts, our aggressive approach reinforces our belief that the Red Mountain VMS camp will yield significant new discoveries at a time when commodity prices, particularly zinc, look to be on the up.

We believe White Rock is well positioned, given its cornerstone asset at Mt Carrington in northern New South Wales contains JORC resources totalling some 338,000 ounces of gold and 23.5M ounces of silver, another two commodities that we believe have a bright future."

White Rock sees significant potential for further discoveries at its Red Mountain Project, and has already expanded its tenement footprint from the original 16 square kilometres to 71 square kilometres (ASX Announcement 24 March 2016).

Highlights at Red Mountain include the following drill results (ASX Announcement 15 February 2016):

#### **Dry Creek**

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

#### **West Tundra Flats**

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

Mineralisation occurs from surface, and is open along strike and down-dip. Preliminary metallurgical test work indicates good recoveries (>90% zinc, >70% lead, >80% gold, >70% silver).

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

[www.whiterockminerals.com.au](http://www.whiterockminerals.com.au)

or contact:

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Phone: +61 (0)3 5331 4644

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*This announcement has been prepared for publication in Australia.*

*This announcement does not constitute an offer to sell, or a solicitation of an offer to buy, securities in any other jurisdiction.*

#### **Competent Persons Statement**

*The information in this report that relates to exploration results is based on information compiled by Mr Rohan Worland who is a Member of the Australian Institute of Geoscientists and is a consultant to White Rock Minerals Ltd. Mr Worland has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Worland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

### About Mount Carrington

- The Mt Carrington Project is located in northern NSW, near the township of Drake on the Bruxner Highway, 4 hour's drive south-west of Brisbane. The tenement package comprises 22 mining leases and two exploration licences over a total area of 229km<sup>2</sup> (Figure 2).
- The Mt Carrington Project contains gold-silver epithermal mineralisation associated with a large 250km<sup>2</sup> collapsed volcanic caldera structure. Gold was first discovered in the district in 1853. In 1988 a mining operation at Mt Carrington focussed on extracting open pit oxide gold and silver ore from the Strauss, Kylo, Guy Bell and Lady Hampden deposits. The oxide ore was depleted by 1990, and with metal prices at US\$370/oz gold and US\$5/oz silver, the small scale mine was closed.
- Since 2010, White Rock has successfully expanded the inventory at Mt Carrington. Indicated and Inferred Mineral Resources total 338,000oz gold and 23.5Moz silver. There are four gold dominant deposits (Strauss, Kylo, Guy Bell and Red Rock), one gold-silver deposit (Lady Hampden) and three silver dominant deposits (White Rock, Silver King and White Rock North). All of these deposits apart from White Rock North are amenable to open pit mining, with mineralisation extending from surface.
- Scoping studies (ASX Announcements 29 March 2016, 30 September 2015, 16 September 2014 and 31 July 2012) support the development of a gold-silver operation at Mt Carrington. Using A\$1,600/oz gold and A\$22/oz silver, the Mt Carrington Project forecasts:-
  - ✓ production of 111,000 oz gold and 6.7Moz silver over a mine life of 7 years,
  - ✓ a low capital cost of A\$24.2M,
  - ✓ an NPV<sub>10</sub> of A\$60.6M and an IRR of 103%,
  - ✓ free cash flow of A\$100M (undiscounted),
  - ✓ a quick payback of 10 months, and
  - ✓ with a C1 cash cost of A\$754/oz gold and \$A10/oz silver.
- The scoping study contemplates a processing circuit capable of treating all ore types. For the gold dominant ore types the optimized pathway consists of a standard milling and flotation circuit producing a rougher concentrate which is subsequently reground and treated in an intensive leach process to recover the precious metals as dore. For the silver dominant ore types the flotation circuit would be upgraded to enable a cleaned concentrate to be produced. Production of a saleable silver concentrate is the most profitable processing pathway for the silver rich deposits.



- The low capital cost is augmented by the presence of already existing key infrastructure from the historic mining operation. This existing infrastructure includes granted mining leases, a 1.5 Mt tailings dam, a 750 mL freshwater dam, site office, the old plant footprint and foundations, a reverse osmosis water treatment plant and access to state grid power. This existing infrastructure has been valued at A\$20M in terms of the savings with respect to a greenfields development scenario.
- The positive results from the scoping studies strongly support the implementation of feasibility studies and future development of the Mt Carrington Project. A number of pre-development optimisation activities are underway in preparation for feasibility studies to be completed in 2016–17 with development targeted in 2017–18.
- The Mt Carrington Mining Leases are enveloped by a large portfolio of Exploration Licences with demonstrated potential for epithermal and intrusion-related gold, silver and copper mineralisation. White Rock has generated and refined an extensive exploration target portfolio at Mt Carrington for staged advancement and drill testing for gold and silver concurrent with the development of the current Resource base (Refer Figure 1: Mt Carrington exploration target pipeline). In addition, more recent work has demonstrated the potential for the project to host significant intrusion-related (porphyry) copper mineralisation.

*The scoping study referred to in this report is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage, or to provide certainty that the conclusions of the Scoping Study will be realised. The material assumptions relating to the scoping study at Mt Carrington provided in the ASX Announcements dated 29 March 2016, 30 September 2015, 14 September 2014 and 31 July 2012 continue to apply and have not materially changed.*

*In discussing ‘reasonable prospects for eventual extraction’ in Clause 20, the JORC Code 2012 (‘Code’) requires an assessment (albeit preliminary) in respect of all matters likely to influence the prospect of economic extraction including the approximate mining parameters by the Competent Person. While a Scoping Study may provide the basis for that assessment, the Code does not require a Scoping Study to have been completed to report a Mineral Resource.*

*Scoping Studies are commonly the first economic evaluation of a project undertaken and may be based on a combination of directly gathered project data together with assumptions borrowed from similar deposits or operations to the case envisaged. They are also commonly used internally by companies for comparative and planning purposes. Reporting the results of a Scoping Study needs to be undertaken with care to ensure there is no implication that Ore Reserves have been established or that economic development is assured. In this regard it may be appropriate to indicate the Mineral Resource inputs to the Scoping Study and the process applied, but it is not appropriate to report the diluted tonnes and grade as if they were Ore Reserves. While initial mining and processing cases may have been developed during the Scoping Study, it must not be used to allow an Ore Reserve to be developed.*



MT CARRINGTON INDICATED & INFERRED MINERAL RESOURCE SUMMARY					
Gold Dominant Resources					
Resource Category	Tonnes	Au (g/t)	Gold Oz	Ag (g/t)	Silver Oz
Indicated	2,830,000	1.3	116,000	3.1	286,000
Inferred	3,810,000	1.3	158,000	2.9	353,000
Indicated & Inferred	6,640,000	1.3	275,000	3.0	639,000
Silver Dominant Resources					
Resource Category	Tonnes	Au (g/t)	Gold Oz	Ag (g/t)	Silver Oz
Indicated	3,550,000	0.3	37,000	72	8,270,000
Inferred	8,950,000	0.1	27,000	51	14,533,000
Indicated & Inferred	12,500,000	0.2	64,000	57	22,803,000
Total Resources					
Total	19,140,000		338,000		23,442,000

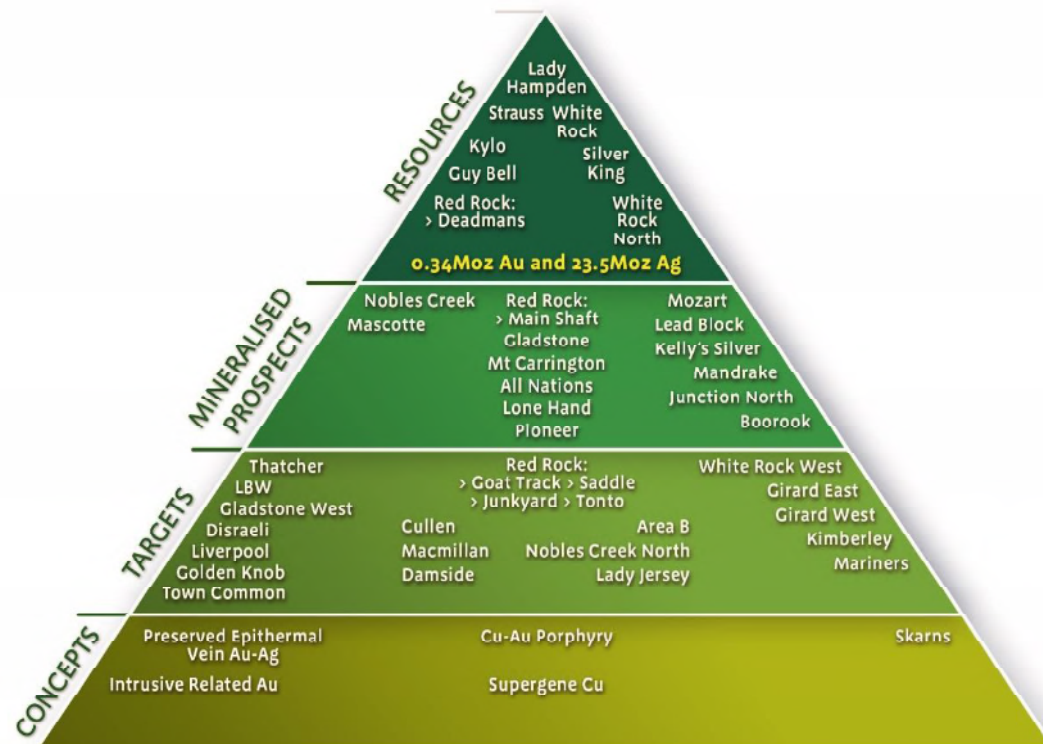
#### **Mt Carrington Project - Mineral Resource Summary.**

##### *Competent Persons Statement*

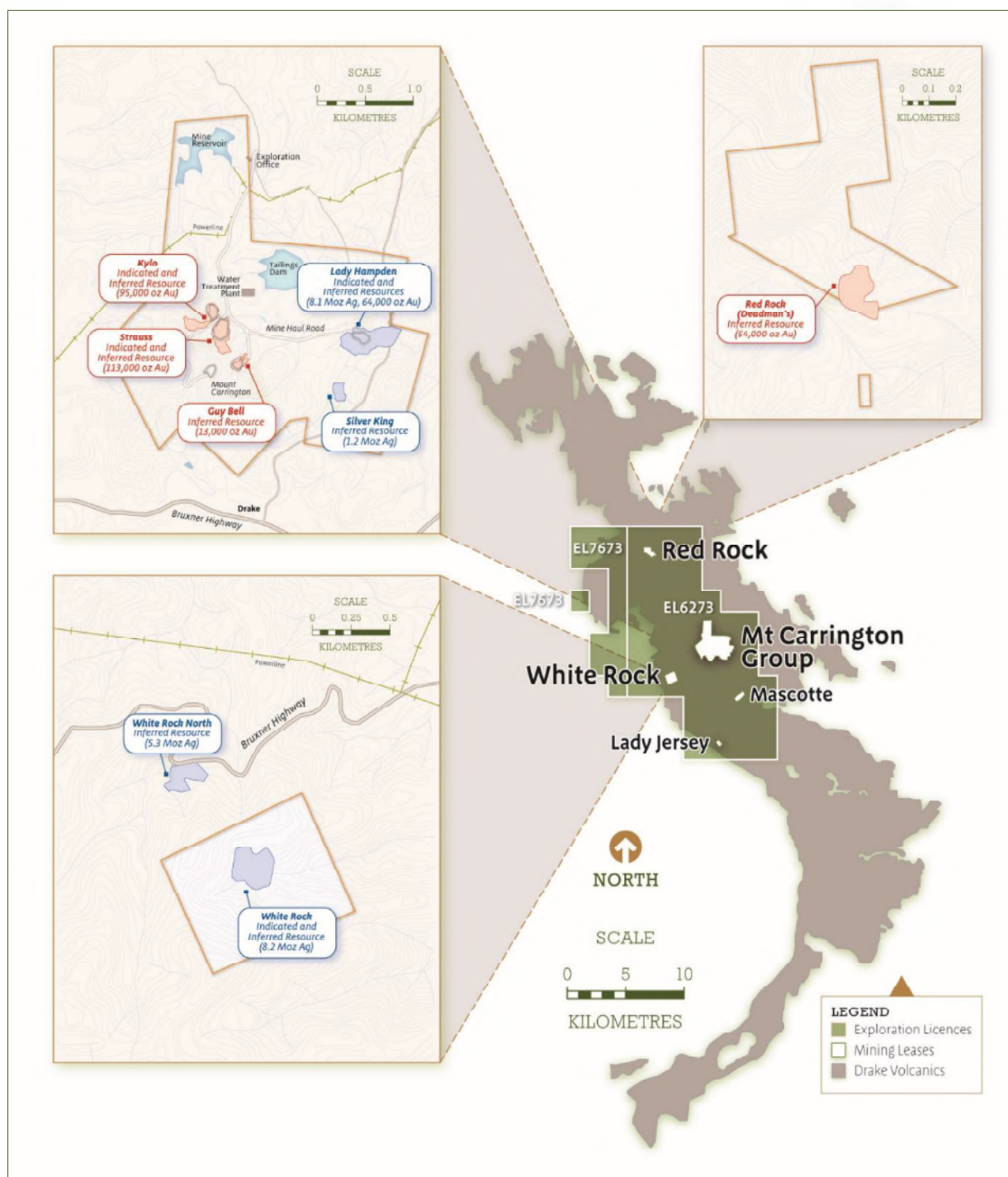
The gold and silver Resource figures for White Rock, Red Rock, Strauss, Kylo, Lady Hampden, Silver King and White Rock North have been taken from Resource estimates of February 2012, July 2013 and November 2013 prepared by Ravensgate Minerals Industry Consultants on behalf of White Rock Minerals Ltd and authored by Mr Don Maclean. Mr Maclean is a member of the Australian Institute of Geoscientists and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Maclean consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004 as per ASX releases by White Rock Minerals Ltd on 13 February 2012, 11 July 2013 and 20 November 2013. 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 gold and silver Resource figures for Guy Bell have been taken from the Resource estimate of October 2008 prepared by Mining One Pty Ltd on behalf of Rex Minerals Ltd and authored by Dr Chris Gee who is a professional geologist with more than 10 years' experience in resource estimation. Dr Gee is a Competent Person as defined by the JORC Code. Mr Gee consents to the inclusion in this report of the matters based on this information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004 as per the ASX release 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.





**Figure 1: Mt Carrington exploration target pipeline.**



**Figure 2: Mt Carrington Project Tenement and Resource Summary**

**About Red Mountain** (ASX Announcement 15 February 2016)

- The Red Mountain Project is located in central Alaska, 100km south of Fairbanks, in the Bonfield Mining District. The tenement package comprises 110 mining claims over a total area of 71km<sup>2</sup>.
- The Red Mountain Project contains polymetallic VMS mineralisation rich in zinc, silver and lead. Previous exploration has defined mineralisation at the two main prospects (Dry Creek and West Tundra Flats).
- Previous drilling highlights include:



**Dry Creek**

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

**West Tundra Flats**

- 1.3m @ 21.0% Zn, 796g/t Ag, 9.2% Pb, 10.2g/t Au & 0.6% Cu from 58.6m
- 3.0m @ 7.3% Zn, 796g/t Ag, 4.3% Pb, 1.1g/t Au & 0.2% Cu from 160.9m
- 1.7m @ 11.4% Zn, 372g/t Ag, 6.0% Pb, 1.7g/t Au & 0.2% Cu from 104.3m
- Mineralisation occurs from surface, and is open along strike and down-dip.
- Good preliminary metallurgical recoveries of >90% zinc, >70% lead, >80% gold, >70% silver.
- VMS deposits typically occur in clusters ("VMS camps"). Deposit sizes within camps typically follow a normal distribution, and deposits within camps typically occur at regular spacing. The known deposits at Dry Creek and West Tundra Flats provide valuable information with which to vector and target additional new deposits within the Red Mountain camp.
- Interpretation of the geologic setting indicates conditions that enhance the prospectivity for gold-rich mineralisation within the VMS system at Red Mountain. Gold mineralisation is usually found at the top of VMS base metal deposits or adjacent in the overlying sediments. Gold bearing host rocks are commonly not enriched in base metals and consequently often missed during early exploration sampling. This provides an exciting opportunity for potential further discoveries at Red Mountain.
- White Rock sees significant discovery potential, given the lack of modern day exploration at Red Mountain. This is further enhanced by the very nature of VMS clustering in camps, and the potentially large areas over which these can occur.