

WHITE CLIFF MINERALS LTD (WCN)

Developing Bonanza Gold in the Kyrgyz Hills

White Cliff Minerals owns ~89% of its flagship gold-copper project in the Kyrgyz Republic. The project contains the high-grade Aucu gold deposit, which the Company discovered in 2014, and is now in the drill-out exploration phase in preparation of a major resource upgrade in early CY17.

Aucu has multi-million ounce potential, with over four mineralised systems [Upper Gold Zone (UGZ), Lower Gold Zone (LGZ), South Gold Zone (SGZ), and Camp Gold Zone] identified over a +3km strike length. The epithermal gold system is exposed at surface and remains open along strike and at depth. White Cliff has a small current JORC resource over 300m of strike, of 1.15Mt @ 4.2g/t Au for 156Koz, which will expand significantly from the drilling now underway (~8,000m RC and diamond program). The Company's Exploration Target on the Upper Gold Zone East (UGZE) alone is for 1-2Mt grading 15-30g/t Au for 0.5-1.2Moz potential, which is estimated over ~500m of mineralised strike, with mineralised lode widths ranging from 1 to 4m.

We re-initiate coverage of White Cliff Minerals with a Speculative Buy recommendation and 12-month price target of 4cps. The Company has current estimated cash of ~A\$1.8m, which is sufficient to fund near-term exploration. With drilling now underway, strong news flow is anticipated. White Cliff is leveraged to exploration success, with strong share price appreciation correlating well to positive drill results, which are anticipated.

Kyrgyz Republic - improving investment destination

Kyrgyz Republic is becoming a more favourable mining destination. The democratic Central Asian country has an improved mining code, full security over tenure (licence renewed and extended until 2020) and has an attractive tax regime in place. Foreign investment is being encouraged with three new gold mining operations opened in the last couple of years; mining activities continue to be on the rise. White Cliff has been working in country for over 6 years and has established strong local and central government relationships.

Aucu Gold could provide a quick pathway to early production

Aucu is largely a sedimentary hosted gold deposit with highly favourable metallurgical properties. Metallurgical test-work to date provides excellent gold recoveries (free-milling ores) with very high gravity gold recoveries (+85%) and total overall recoveries +95% (very high gold liberation). The altered sandstone host rock is only of moderate hardness, which we anticipate could provide low mining (reduced drill and blast) and processing (low energy requirement due to ease of crushing) costs. With mineralisation at surface at very high-grades could also equate to low capital costs, as even a small scale operation could provide significant production ounces.

WA gold, nickel and lithium prospects being progressed

White Cliff's Australian portfolio spans prospective greenstone belts within WA, containing gold and nickel prospects. White Cliff's 100%-owned Ironstone gold prospect near Laverton, also holds strong upside, with mineralised quartz veins (grading over 5g/t Au) within a shear zone identified, which remains untested over a ~500m strike length. Assays are pending from recently completed soil geochem samples. WCN recently entered into a JV with Lontown Resources (LTR), whereby LTR can earn up to a 70% interest in the Lake Percy Project through sole funding lithium exploration.

10 Aug 2016

Share Price	\$0.009
Price Target	\$0.040

Brief Business Description:

Exploration for gold, copper and nickel.

Hartleys Brief Investment Conclusion

High-grade gold discoveries in the Kyrgyz Republic. Gold and nickel explorer in WA with multiple drill-ready targets. Active exploration program. New lithium JV.

Chairman & MD

Michael Langoulant (Non-Exec Chair)
 Todd Hibberd (Managing Dir)

Top Shareholders

ADE Super Fund	20.9%
Directors	4.3%

Company Address

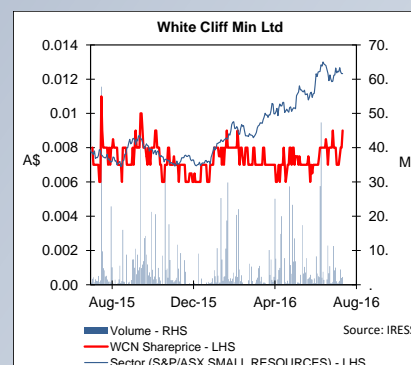
Suite 2, Level 1, 47 Havelock St
 West Perth, WA, 6005

Issued Capital	1527.5m
- fully diluted	1885.9m
Market Cap	A\$13.7m
- fully diluted	A\$17.0m

Cash (30 Jun 16a)	A\$1.8m
Debt (30 Jun 16a)	A\$0.0m
EV	A\$11.9m

EV/Resource Au Oz	\$76
EV/Reserve Au Oz	na

	Gold Moz	Copper Kt
Reserves	na	na
Resources	0.156	40.0



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Hartleys has assisted in the completion of capital raisings in the past 12 months for White Cliff Minerals Limited ("White Cliff") for which it has earned fees. Hartleys has provided corporate advice within the past 12 months and continues to provide corporate advice to White Cliff for which it has earned fees and continues to earn fees. Hartleys has a beneficial interest in 15 million White Cliff options.

<div>White Cliff Minerals Limited</div> <div>WCN</div>						<div>Share Price</div> <div>\$0.009</div>						<div>Aug-16</div> <div>Speculative Buy</div>					
Key Market Information																	
Share Price\$0.009																	
Market Capitalisation\$13.7m																	
Net Cash (Debt)\$1.8m																	
Issued Capital1527.5m																	
Issued Capital (fully diluted ITM options)1527.5m																	
Options and Performance Rights358.4m																	
Issued Capital (fully diluted all options)1885.9m																	
EV\$11.9m																	
Valuation\$0.036																	
Price Target\$0.040																	
ProjectsInterestLocationCommodity																	
Aucu89%KyrgyzAu																	
Chanach89%KyrgyzCu																	
Lake Percy JV*100%WALi																	
Merolia100%WANi, Cu, Au																	
Laverton Gold100%WAU																	
Bremer Range100%WAAu, Ni																	
* LTR can earn up to 70% by spending \$1.75m within 4 years																	
JORC ResourcesMtGradeMetalLC																	
Aucu - GoldMtg/t AuKoz AuLC																	
LGZInf0.693.680.01g/t Au																	
UGZInf0.475.176.01g/t Au																	
TotalInf1.154.2156.01g/t Au																	
Chanach - CopperMt% CuKt CuLC																	
TotalInf10.000.440.00.25% Cu																	
P&LFY2016eFY2017eFY2018e																	
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Total Costsna nana																	
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EBITna nana																	
Net Interestna nana																	
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Tax Expensenanana																	
NPATlosslossloss																	
Abnormal Itemsnana																	
Reported Profitlosslossloss																	
DirectorsCompany Details																	
Michael Langoulant (Non-Exec Chair)Suite 2, Level 1, 47 Havelock St																	
Todd Hibberd (Managing Dir)West Perth, WA, 6005																	
Rodd Boland (Non-Exec Dir)+61 8 9321 2233																	
http:// www.wcminerals.com.au																	
Top Shareholdersm shs%																	
ADE Super Fund320.020.9%																	
Directors65.814.3%																	
Investment Summary																	
Actively exploring a portfolio of projects in WA and Kyrgyz Republic																	
High-grade epithermal gold discovery at Aucu prospect, Kyrgyz																	
Gold and nickel exploration within prospective terrains in WA																	
Newsflow - 2016TargetProject																	
Q2/Q3 CY16Aucu diamond drillingAuAucu																	
Q3/Q4 CY16Aucu drilling resultsAuAucu																	
Q3 CY14WA gold geochem resultsAuWA																	
Q3 CY14WA nickel geochem resultsNiWA																	
Q4 CY16WA project follow-upAuWA																	
Q1 CY17Aucu resource updateAuAucu																	
Unpaid Capital																	
Options																	
ExpiryNo (m)\$ (m)Ave Pr% Ord																	
15-Dec-16110.001.650.0157.2%																	
11-Mar-17102.053.060.0306.7%																	
31-Dec-17202.854.060.02013.3%																	
1-Dec-1830.000.360.0122.0%																	
444.909.130.02129.1%																	
Comments																	
Exploration company advancing recent discoveries. Leveraged to exploration success/improved market sentiment.																	
Analyst: Mike Millikan																	
Phone: +61 8 9268 2805																	
Last Updated: 10/08/2016																	
Sources: IRESS, Company Information, Hartleys Research																	

COMPANY OVERVIEW

*Gold, copper and
nickel focused
explorer*

*The project portfolio
largely covers
prospective gold-
copper districts of
within the Kyrgyz
Republic and within
Western Australia*

*LTR is now earning
into WCN's Lake
Percy Project for
lithium potential*

White Cliff Minerals Ltd is an ASX-listed [Ticker: "WCN"] precious metals and base metals explorer with a portfolio of projects in the Kyrgyz Republic and Western Australia. The main commodity focus is gold, copper and nickel.

White Cliff was incorporated in 2007 to explore for nickel and gold deposits in Western Australia. The Company's flagship project (Aucu) is now located in western Kyrgyz Republic (Central Asia), and contains extensive porphyry-related high-grade gold mineralisation. Kyrgyz Republic is becoming a more favourable mining destination, boasting an improved mining code to attract and retain foreign investment. White Cliff's Aucu exploration licence is valid to December 2020, having been renewed early this year, and is convertible to a mining permit (for an additional 25 year term) if deemed warranted.

The Company's Kyrgyz exploration program is largely focused on advancing its high-grade Aucu gold discovery towards development and ultimately production. The Aucu gold deposit was discovered by WCN in 2014, and currently contains a modest ~156Koz resource at a high-grade of ~4.2g/t Au, but with mineralisation open in all directions and drilling underway, significant resource growth is anticipated, with potential to evolve into a million ounce system overtime.

In addition to high-grade epithermal gold occurrences, the project also contains multiple copper-gold porphyry targets, with the Chanach copper porphyry discovered by WCN in 2010, currently the most advanced copper prospect. Chanach has a current estimated resource containing ~40kt of copper from a deposit which remains open. White Cliff's current exploration focus is however, the delineation of shallow, high-grade gold deposits. The project is located within "elephant country" with major deposits containing over 90Moz of gold and over 25Mt of copper located within 100km.

White Cliff's Australian exploration portfolio spans prospective greenstone belts within Western Australia, containing gold, nickel and now lithium prospects. The Company recently entered into a JV with Liontown Resources (LTR), whereby LTR can earn up to a 70% interest in the Lake Percy Project (Lake Johnston) through exploration expenditure commitment (A\$1.75m within 4 years).

Fig. 1: Project Locations – Kyrgyz Republic (LHS) and Western Australia (RHS)



Source: White Cliff Minerals Limited

AUCU GOLD PROJECT (89%), KYRGYZ REPUBLIC

Fig. 2: *Aucu Gold Project Snap Shot*

Aucu

- Interest: 89%
- Location: Western Kyrgyz Republic
- Tenement coverage: ~57km², tenure term through to Dec 2020
- Project stage: Exploration resource definition
- Mineral Resources: Gold: 1.15Mt @ 4.2g/t Au for 156Koz; Copper: 10Mt @ 0.41% Cu for 40Kt
- Commodity Target: Gold and Copper
- Key Mineralised Zones: epithermal and porphyry; +1Moz gold ore body potential

Current 89% project interest

Tenure covers ~57km²

Background

Aucu Gold Project covers ~57km² of tenure in the Kyrgyz Republic (Central Asia), with the project located some ~350km southwest of the capital city of Bishkek.

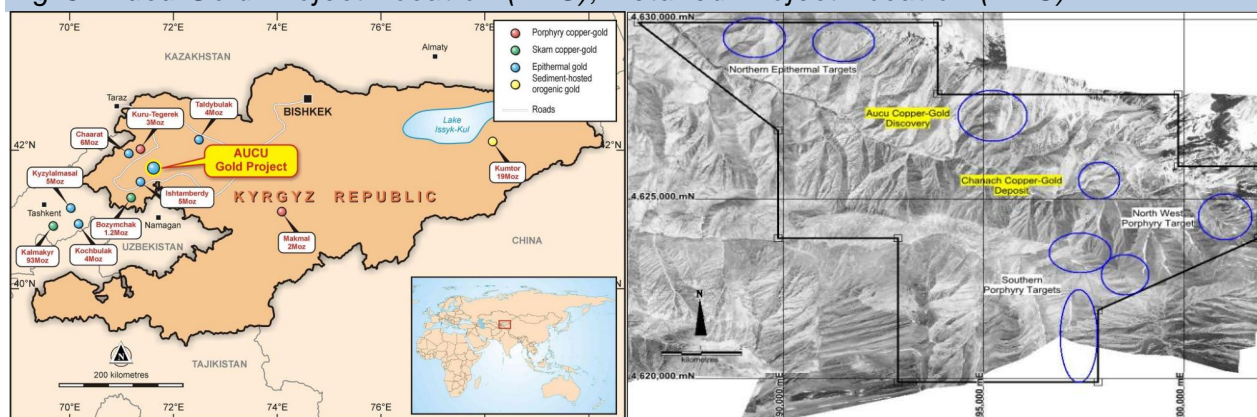
White Cliff first acquired an interest in the project (initially referred to as the *Chanach Gold-Copper Project*) in May 2010 via a cash and scrip deal and the requirement to sole fund exploration during the earn-in period. The Company now holds a ~89% interest in the project, with the balance held by local partners. The project area contains extensive porphyry-related gold and copper mineralisation. The Aucu exploration licence is valid to December 2020, having been renewed in early 2016, and is convertible to a mining permit (for an additional 25 year term) if deemed feasible. The Company aims to convert the exploration permit into a mining permit in 2017 or 2018. Kyrgyz Republic is becoming a more favourable mining destination, boasting an improved mining code to attract and retain foreign investment.

Prospective for high-grade gold mineralisation and large copper-gold systems

The project area is located within "elephant country" with major deposits containing over 90Moz of gold and over 25Mt of copper located within 100km radius

White Cliff discovered the **Aucu gold deposit** in 2014. The gold deposit remains open in all directions and currently contains a modest ~156Koz resource at a good-grade of ~4.2g/t Au. Drilling is now underway to significantly grow the mineral resource with the deposit having potential to evolve into a +Moz system over time. In addition to high-grade epithermal gold occurrences, the project also contains multiple copper-gold porphyry targets, with the **Chanach copper porphyry** discovered by White Cliff in 2010, currently the most advanced copper prospect. Chanach has a current resource containing ~40kt of copper from a deposit that remains open. White Cliff's current exploration focus is however, the delineation of shallow, high-grade gold deposits.

Fig. 3: Aucu Gold Project Location (LHS); Detailed Project Location (RHS)



Source: White Cliff Minerals Limited

Mineralisation is mostly contained within the porphyry units as broad alteration containing copper sulphides and within narrow quartz veins and faults containing gold.

Aucu Gold Deposit:

Discovered in 2014

High grade deposit

Outcrops at surface

Visible (free) gold

Good gold recoveries

+Moz potential

Open along strike and at depth

The project area has an elevation of ~2,200-3600m, the vast majority of the gold mineralisation defined within a valley that over 25km from the nearest local village

The valley is totally uninhabited, but easily accessible

Geological Setting – highly prospective, under explored

The geological setting of the project area consists largely of Cambrian to Permian aged intrusive porphyries, bounded and overlain by volcanics (basalts), and sedimentary rock units. Mineralisation is mostly contained within the porphyry units as broad alteration containing copper sulphides and within narrow quartz veins and faults containing gold.

The **Aucu gold deposit** is a structurally controlled Permian aged lode-gold deposit that occurs within the northern part of the Tian Shan Gold belt, a mineralised corridor that extends 2,500km from Western China to western Uzbekistan. Gold mineralisation occurs along shear zones hosted within sandstone, conglomerates and minor granodiorite. The gold mineralisation can be disseminated or hosted within the shear zones. Native coarse gold has been identified in surface outcrops of the quartz veins over an elevation change of 500m suggesting that the gold bearing structures could have substantial depth extent.

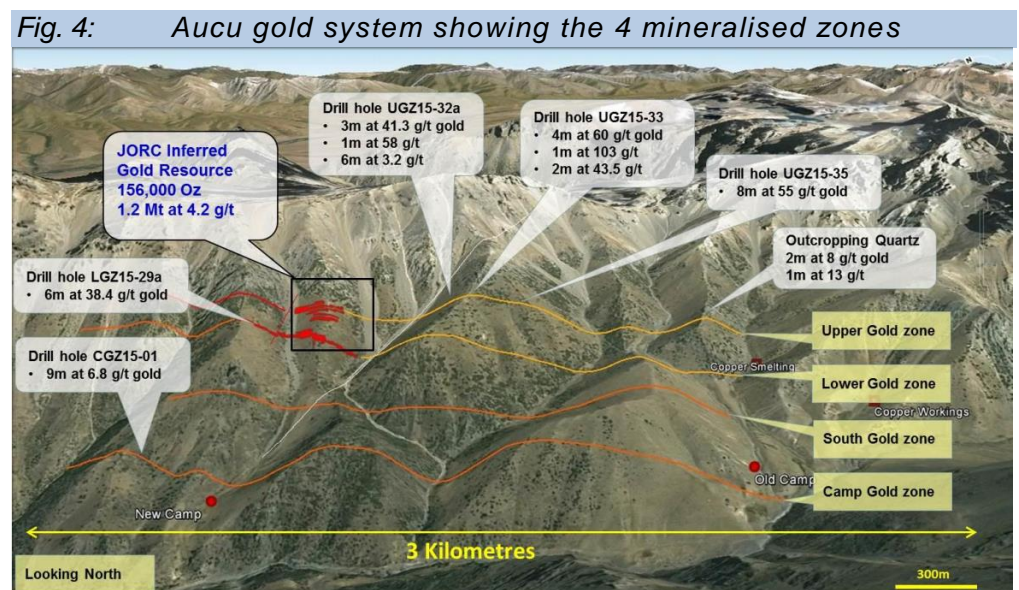
The **Chanach copper deposit** is a Permian aged intrusive porphyry system dominantly within granodioritic porphyry and dioritic dykes. Mineralisation occurs with narrow 1-5m wide shear zones surrounded by broad zones of alteration.

Aucu - epithermal gold system growing in size

The Aucu gold deposit was first discovered in 2014, following successful trenching and rock chip sampling, which reported trenching results over 4m grading +4.5g/t Au, and rock-chip sampling extending mineralisation along strike at significant grades (over 7g/t Au in parts). Follow-up drilling confirmed high-grade mineralisation at shallow depths, with a drill highlight of **6m @ 13.1g/t Au** from 47m.

Within the first year of exploration, the Company defined a small **156Koz Inferred resource grading 4.2g/t Au** at surface down to a depth of 100m, over some 300m of strike. Drilling in 2015 extended mineralisation 1.3km along strike, with multiple holes returning very high gold grades. Aucu has multi-million ounce potential, with over four mineralised systems - Upper Gold Zone (UGZ), Lower Gold Zone (LGZ), South Gold Zone (SGZ), and Camp Gold Zone now identified over a +3km strike length.

The eastern UGZ is of particular interest, with the average grade of the gold mineralisation across the zone ~45 g/t Au. This outcropping gold zone spans over 500m in strike, consists of several parallel lodes and remains open.



Source: White Cliff Minerals Limited

The high-grade eastern UGZ currently spans over 800m of strike, extends to depths exceeding 250m and the proposed resource drill out is expected to grow inferred resources and add some higher confidence indicated resources

The Exploration Target for the UGZE is 1-2Mt @ 15-30 g/t for 0.5Moz to 1.2Moz of gold

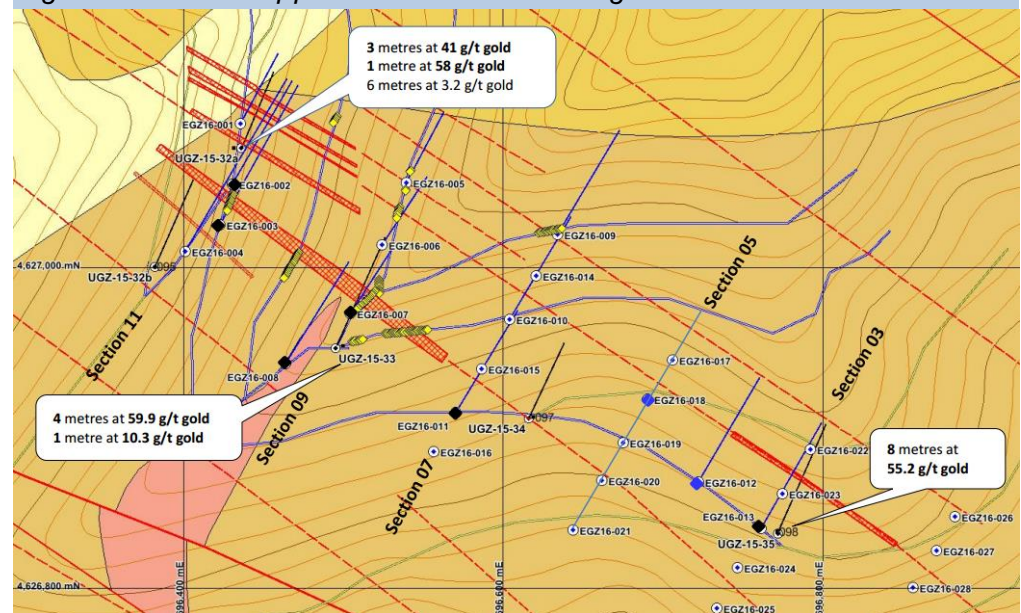
On current timing, which is subject to drilling, White Cliff should be in a position to release the updated resource in late CY16/early CY17

The Aucu project area is well located within a regional mining district, with good infrastructure (roads, rail), available grid power and water sources

The structurally controlled epithermal system is located on the outer edge of a large alteration system, some 2kms north-west of the Chanach porphyry deposit. The gold system outcrops at surface and contains abundant visible free gold, in particular within the Upper Gold Zone (UGZ), testament to the previously reported high-grade drill intervals of **8m @ 55g/t Au**, **6m @ 38g/t Au** and **4m @ 60g/t Au**, which will be followed up in the current drill campaign.

During the June quarter 2016, White Cliff recommenced diamond drilling at Aucu, with the drill program largely focused on testing the high grade eastern section of the UGZ. The Company currently has two diamond drill rigs on site and to date has completed 6 diamond drill holes for some 1,074m. Mineralised zones have been identified in all holes drilled to date with assays currently pending at the time of writing. The rigs are currently completing holes at EGZ16-012 and EGZ16-018 (as displayed below as blue diamonds).

Fig. 5: Aucu Upper Gold Zone - drilling



Source: White Cliff Minerals Limited

White Cliff's 2016 exploration program is focused on drilling out the Upper Gold Zone East (UGZE) along 800m of strike and up to 200m vertical depths. Drilling will initially be conducted on 100m spaced sections followed by 50m infill fence aimed at generating an Indicated and Inferred gold resource.

The Exploration Target for the **UGZE is 1-2Mt @ 15-30 g/t for 0.5Moz to 1.2Moz of gold**. The Company's assumption of target size is based on the average grade of existing drill intercepts completed within the UGZE covering some 500m of strike, 200m of depth with true widths of each lode ranging between 1 and 4m. On current timing, which is subject to drilling, White Cliff should be in a position to release the updated resource in early CY17.

Following the resource upgrade and further engineering and cost evaluations, the Company should be able to design a preliminary open pit which may enable the conversion of the Indicated resource into a maiden reserve. The Aucu project area is well located within a regional mining district, with good infrastructure (roads, rail), available grid power and water sources.

Metallurgical test-work to date provides excellent gold recoveries (free-milling ores) with very high gravity gold recoveries (+88%) and total overall recoveries 99% (exceptional high gold liberation).

Largely hosted in Sandstone which is of only moderate hardness, could provide low mining (reduced drill and blast) and processing (low energy requirement due to ease of crushing) costs

Two of the nearest large epithermal gold deposits to the Aucu gold project, is the Chaarat gold deposit (~6Moz) located ~40km north-west and the Ishtamberdy gold deposit (~5Moz) located only ~25km south-west

Excellent initial metallurgy – free-milling ores

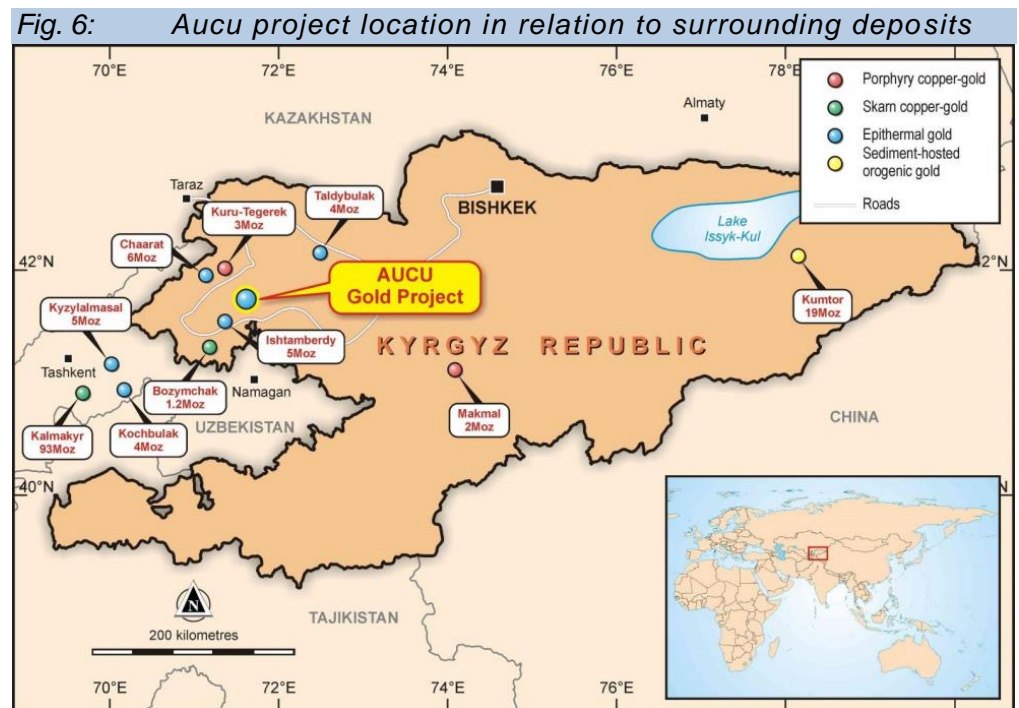
White Cliff has already completed initial metallurgical test work on the Aucu gold deposit. Metallurgical test work on some 182 drill intervals (69 composite samples) has provided an overall total gold recovery of 99% based on cyanide leaching after being milled to around 75 microns (grind size $P_{80} \sim 75\mu\text{m}$). Gravity recoverable gold was also very high at 88.6%. The testwork completed to date highlights that the Aucu deposit is amenable to standard processing methods. Some zones may contain some copper, especially in veins in close proximity to porphyries in the project area. The management of these zones could be through ore blending and or concentrate generation, which is being considered. However, the high recoverable gravity gold does provide opportunities to remove a vast majority of the gold near the front-end (ie through use of a gravity circuit).

Aucu is largely a sedimentary hosted gold deposit with highly favourable metallurgical properties. The altered sandstone host rock is only of moderate hardness, which we anticipate could provide low mining (reduced drill and blast) and processing (low energy requirement due to ease of crushing) costs. With mineralisation at surface at very high-grades could also equate to low capital costs, as even a small scale operation could provide significant production ounces.

Given the exceptionally high recoveries and favourable ore characteristics, the Company has the objective of defining a major resource by the end of CY2016 for release in early CY2017, and then commence project development studies.

Surrounded by large epithermal gold deposits

Two of the nearest large epithermal gold deposits to the Aucu gold project, are the **Chaarat** gold deposit (~6Moz) located ~40km north-west and the **Ishtamberdy** gold deposit (~5Moz) located only ~25km south-west, both are contained in the western part of the Tien Shan Belt.



Source: White Cliff Minerals Limited

Epithermal gold deposits consists of three main sub-types: high sulphidation ores, intermediate sulphidation ores and low sulphidation ores

Nearly any rock type may host epithermal gold deposits; however, they are most commonly found in igneous and sedimentary rocks

Ishtamberdy epithermal gold deposit is high-grade (7.8g/t Au), and is expected to be capable of producing ~120Kozpa

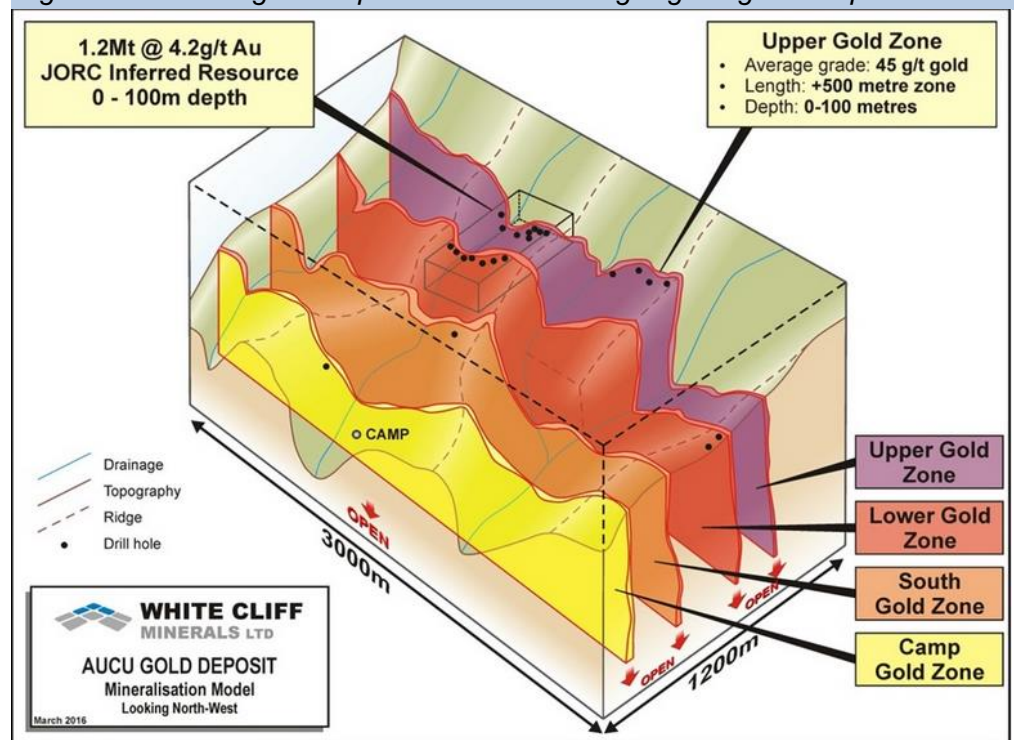
Chaarat is reportedly the second largest gold deposit in the Kyrgyz Republic, behind the ~19Moz Kumtor gold deposit. Chaarat is currently 100%-owned by Chaarat Gold Holdings, an AIM-listed (CGH) gold exploration and development company. The gold mineralisation at Chaarat is defined as being “deep epithermal”, due largely to its mineral composition of gold (Au), silver (Ag), antimony (Sb) and arsenic (As), and hydrothermal (chemical) alteration of the host rocks. In comparison Aucu is at this stage considered to be largely shallow epithermal mineralisation.

Chaarat contains both free-milling and sulphide-associated refractory ores, whereas metallurgical test work of Aucu reports to date only free-milling mineralisation, which is expected to be amenable to conventional processing techniques.

The Feasibility Study into the potential development of Chaarat highlighted a gold project capable of producing over 210Kozpa over a long mine life (+18 years) at attractive AISC of ~US\$635/oz. However, due to the refractory ores in parts of the deposit, the reported pre-production capital costs are considered high at US\$684m. In addition, Chaarat reported an un-optimised NPV₈ of US\$351m (using a gold price assumption of US\$1,250/oz), which though clearly positive is considered non ideal given the anticipated capital outlay.

Once again in comparison Aucu is shallow, high-grade deposit with the contained gold expected to be easily recoverable (free milling). We would anticipate significantly lower pre-production capital costs, which will ultimately be determined by the resource size and grade; conversion to mineable reserves and development studies (likely to commence next year in CY2017).

Fig. 7: Aucu gold deposit schematic highlighting scale potential



Source: White Cliff Minerals Limited

The **Ishtamberdy** gold mine is operated by Chinese entity LinBao Gold, who first commenced gold production in September 2015. The project is expected to produce only 25Koz of gold in 2016, but little information is provided in regards to production costs and original capital costs. The epithermal gold deposit is high-grade (7.8g/t Au), and is expected to be capable of producing ~120Kozpa.

White Cliff has a strong track record of working within the Kyrgyz Republic

The Country has a favourable tax regime with revenue based royalties of 3%, sales tax of 2%, region tax of 2% and variable income tax

Kyrgyz Republic borders Kazakhstan and China

Kyrgyz Republic – improved support for mining

White Cliff has a strong track record of working within the Kyrgyz Republic. The Kyrgyz State Agency for Geology and Mineral Resources (SAGMAR) earlier this year issued a 5-year extension to the Chanach exploration licence (AP590) with the expiry date now the end of December 2020. The exploration licence can be converted to a mining permit, which if granted provides an additional 25 year term.

The Kyrgyz Republic is a democratic republic which borders Kazakhstan and China. The current government is highly supportive of new mining projects, with the Prime Minister opening 3 new gold mines in the last 2 years (2014 and 2015). The country has an improved mining law which offers strong legal security of tenure. The Country has a favourable tax regime with revenue based royalties of 3%, sales tax of 2%, region tax of 2% and variable income tax.

Generally the country has very good infrastructure, with the Aucu project having well maintained access roads, and is within 200km of a railway network. The project is also located near a regional mining hub which could potentially provide low-cost labour.

Fig. 8: Kyrgyz Republic Location



Source: Google Maps

OTHER PROJECTS – WESTERN AUSTRALIA

Merolia Project (100% WCN) – Gold and Nickel

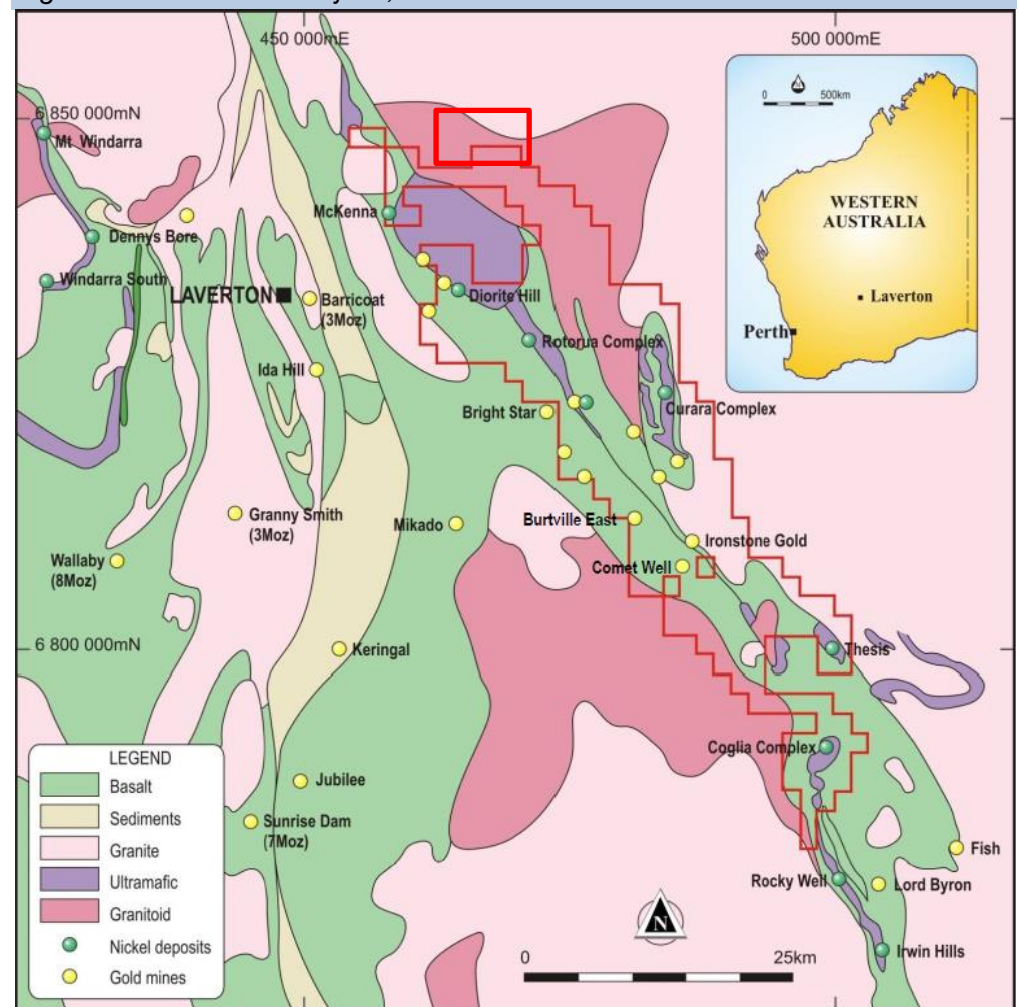
White Cliff's Merolia project is located to the southeast of Laverton, WA. The Company controls an extensive tenement packages containing several high-grade gold and nickel prospects, within the highly prospective Merolia Greenstone Belt.

The project area contains extensive volcanic (basalt) sequences that are prospective for gold mineralisation including the Ironstone prospect where historical drilling identified 24m @ 8.6g/t Au. Recent activity has seen the Company conduct an extensive soil sampling campaign to test multiple gold targets at the Ironstone, Comet Well and Burtville East prospects.

Australian projects cover gold and nickel ground in and around Laverton, WA

The Merolia project is contained within the Merolia Greenstone Belt

Fig. 9: Merolia Project, near Laverton WA



Source: White Cliff Minerals Limited

The Ironstone prospect is a key gold target area, containing gold in sheared quartz veins which remains open

Ironstone gold prospect

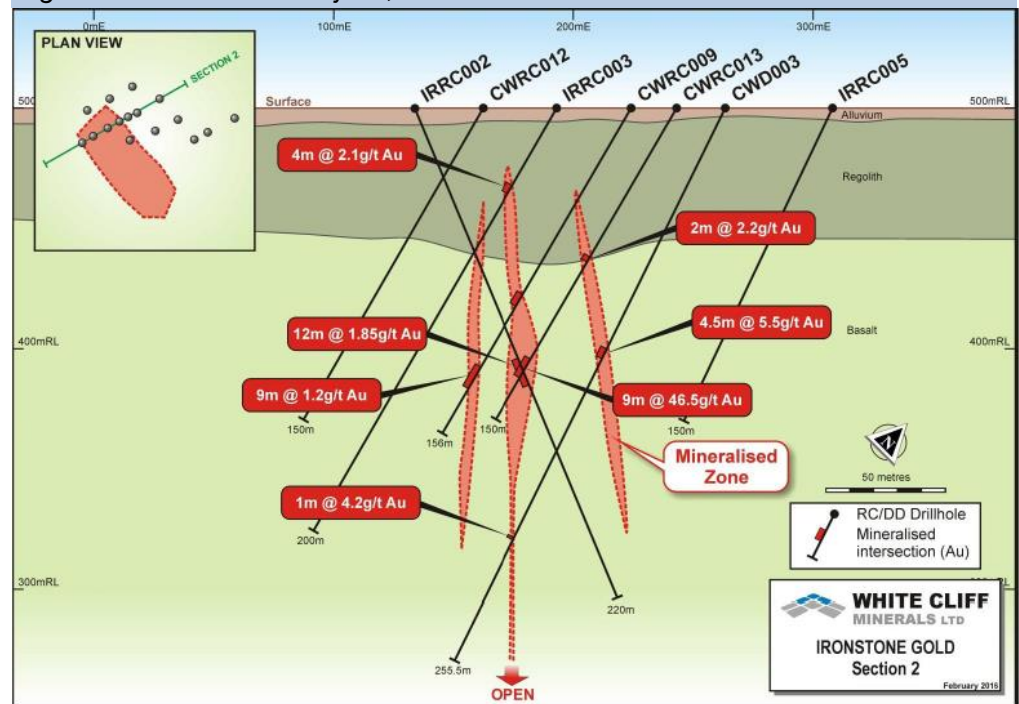
Following a successful drilling campaign in early 2016, where significant gold mineralisation was identified at the Ironstone gold prospect, WCN has conducted follow-up soil sampling during the recent JunQ. The geochem sampling program tested for both strike extensions and for parallel mineralised structures prior to committing to further drilling. A total of 407 soil geochemical samples have been collected on a 25m x 25m grid over the known gold mineralisation and on a 50m x 50m grid north of the known mineralisation. Assay results are pending.

It is likely WCN will complete follow-up drilling at Ironstone in late CY16

Drilling at the start of the year (Jan 2016) which consisted of 5 holes for some 910m intersected mineralised zones of shearing and quartz veining within basalts in the target zones. Gold mineralisation was identified in the main target zone intersecting **12m @ 1.85 g/t Au** from 116m. New sampling and testing of quartz veins in a previous diamond hole (CWD003) intersected **4.5m @ 5.5 g/t Au** from 119m.

Historical drilling targeted the mineralisation further to the east, but appears to have missed the main prospective zone which is completely untested for at least 500m. Sub-audio magnetics (geophysics) conducted over the prospect indicates that the mineralised structures are offset by faulting.

Fig. 10: Merolia Project, near Laverton WA



Source: White Cliff Minerals Limited

Geochemical samples were also collected over the Comet Well Trend, and included work over an area which reported significant gold nuggets (see below)

Comet Well Trend



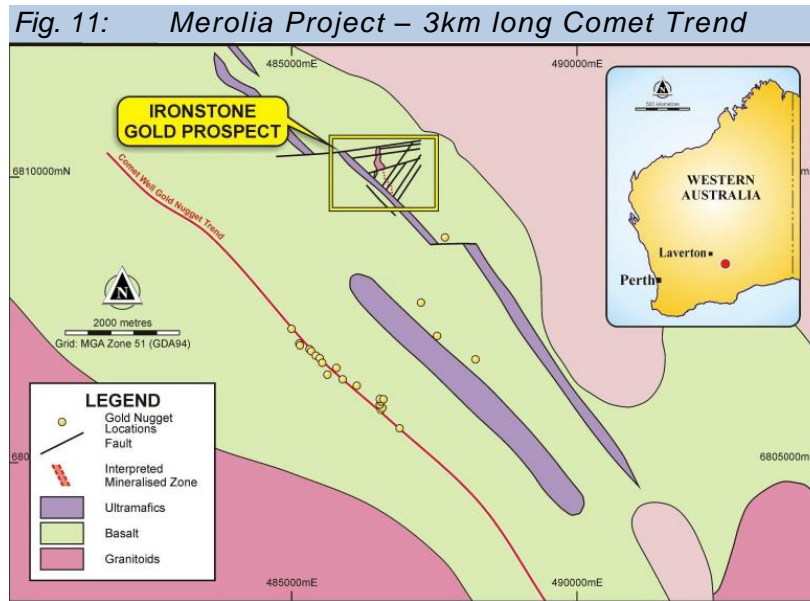
Source: WCN

Soil geochemical sampling programs were also completed during the JunQ over the Comet Well gold trend (along its strike north and south). Some of the key prospects sampled were the Comet Well nugget trend and Burtville East. A total of 1,572 samples were collected on grid spacing of 100 metre lines and 50 metre spaced samples. Assay are pending and expected to be released soon.

White Cliff reported the discovery of gold nuggets within the regional Ironstone Gold prospect in February 2016. Detailed metal detecting identified a significant number of gold nuggets at surface over a 3km long trend (the Comet Well trend) that coincides with a major regional fault structure. The nuggets were located by prospectors operating under a formal tribute agreement with the Company. Recent prospecting has identified visible gold from a 2m deep pit occurring adjacent to a quartz vein where 40z of gold has been recovered.

Along the 3km trend a total 40oz of gold has been recovered with the largest nugget weighing 20g

WCN has the 3km long Comet Trend to test for further gold mineralisation



Source: White Cliff Minerals Limited

Laverton Project (100% WCN) – Gold

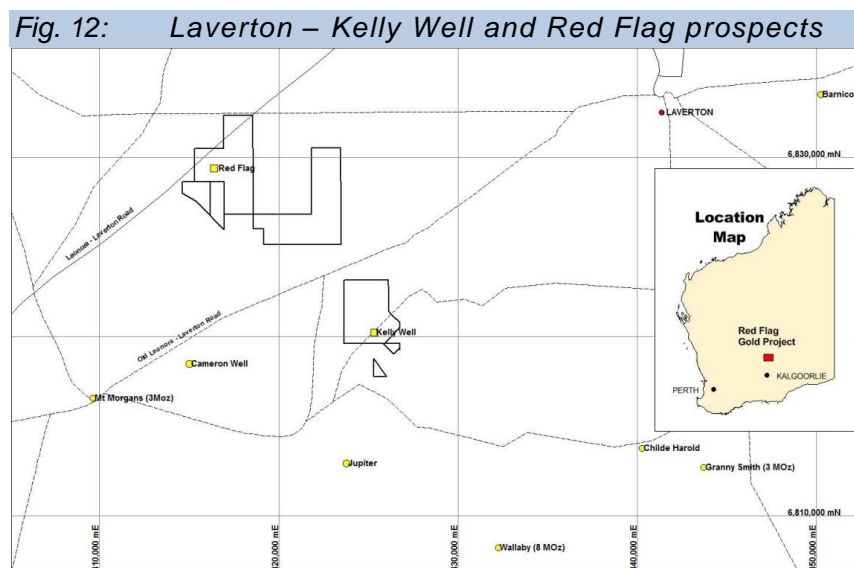
White Cliff's Laverton Project consists of 100km² in the Laverton Greenstone belt. The core prospects are located 20km south of Laverton in the core of the structurally complex Laverton Tectonic zone immediately north of the Wallaby Gold Mine (8Moz).

WCN's Laverton Gold Project is located in a "hot exploration address" to the north of DCN's Mt Morgans Project (Westralia and Jupiter)

Historical exploration at the **Kelly Well prospect** has identified a zone of mineralisation (8m @ 8.8 g/t Au and 4m @ 5 g/t Au) extending over 300m in length at the base of an ancient drainage system and in the underlying bedrock. Very little work has been carried out on the prospect and mineralisation is interpreted to be open in all directions. The Company is currently re-logging existing drill core and reinterpreting the structural geology prior to planning drilling.

Another key prospect is the **Red Flag prospect** located some 35km south-west of Laverton. The Company has identified a +500m gold anomaly (Red Flag West) within a sedimentary sequence with previous drilling intersecting quartz veining with trace sulphides. Whereas, the Red Flag East gold anomaly extends over 2kms along the contact between a basalt and felsic rock units. Further sampling is expected to be undertaken prior to drilling.

Highly prospective and under explored project area

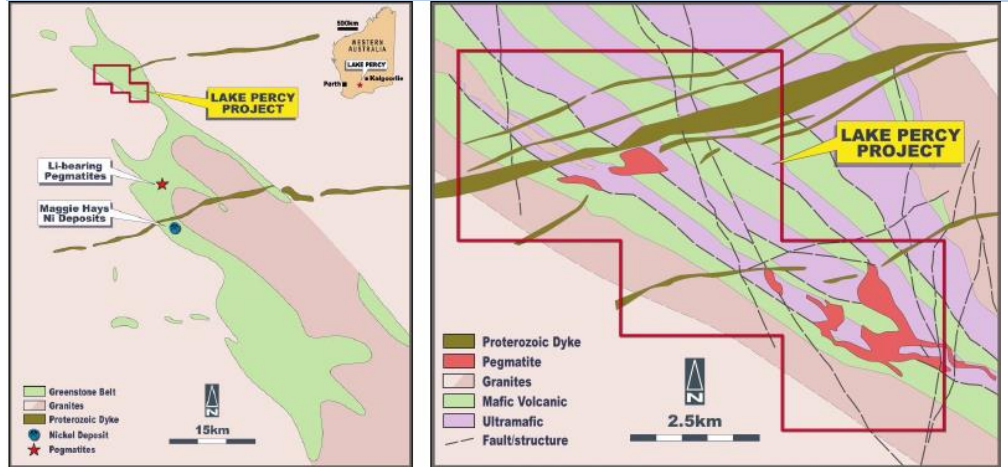


Source: White Cliff Minerals Limited

Lake Percy - Lithium JV with Lontown Resources (LTR)

White Cliff recently (JunQ) agreed to a joint venture (JV) over its Lake Percy tenement (EL63/1222) located ~430km east of Perth. Under the JV, Lontown Resources can earn up to 70% equity in the 41km² licence area.

Fig. 13: Merolia Project, near Laverton WA



Source: White Cliff Minerals Limited

The project is considered prospective for lithium mineralisation due to the presence of very large pegmatite bodies which are up to 550m thick and 3km long. Located at the northern end of Lake Johnson Greenstone Belt, which hosts several lithium-bearing pegmatites, as reported by lithium explorers in the region (Kidman Resources (KDR), Poseidon Nickel (POS) and Marindi Metals (MZN)).

The project area has been extensively explored for nickel, including multiple phases of RC and diamond core drilling; however, there have been very few assays for lithium as the pegmatites have largely been ignored. Strong surficial weathering means that spodumene is unlikely to be preserved at surface and further drilling will be required to test for primary lithium mineralisation.

White Cliff Minerals has agreed to terms whereby Lontown may acquire up to 70% of the Lake Percy Project, on the following terms:

- by spending A\$1m on exploration within 3 years to earn 51% equity;
- at Lontown's election, it can increase its equity to 70% by spending an additional A\$750k before the 4th anniversary of the JV Agreement execution; and
- by committing to spending \$50kon exploration before having the right to withdraw from the joint venture.

The initial phase of exploration will comprise a review of previous drill data to assist with the defining of sub-surface extension of the pegmatites and geochemical sampling to test for pathfinder elements (ie tantalum and niobium). Where possible, previous drill holes will be also be sampled to test for lithium in pegmatites that have already been intersected. This work will be used to define targets for drill testing.

WCN recently entered into a JV with Lontown Resources (LTR), whereby LTR can earn up to a 70% interest in the Lake Percy Project through sole funding lithium exploration

Initial work will involve a review of previous drill data sets to identify any potential extensions to the pegmatites which may be lithium bearing

COMPARATIVES

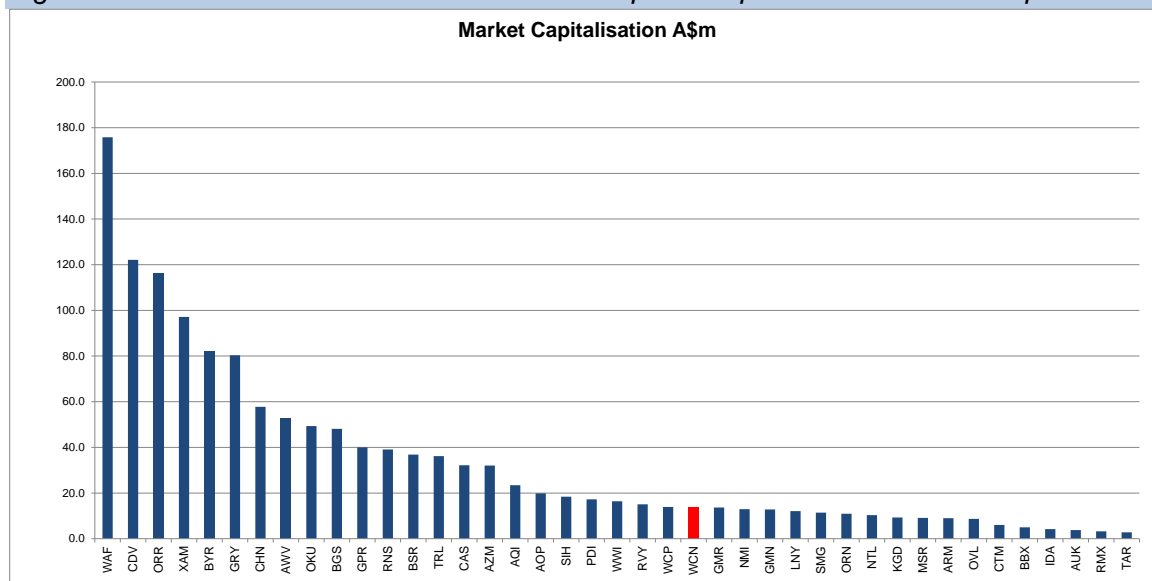
*ASX-listed
international gold
developers and
explorers – we have
over 40 companies on
our list*

GOLD

ASX listed international gold developers/explorers comparisons are summarised in the below figures. White Cliff remains undervalued with potential for significant re-rating as the projects (both in Kyrgyz Republic and in Australia) are further progressed.

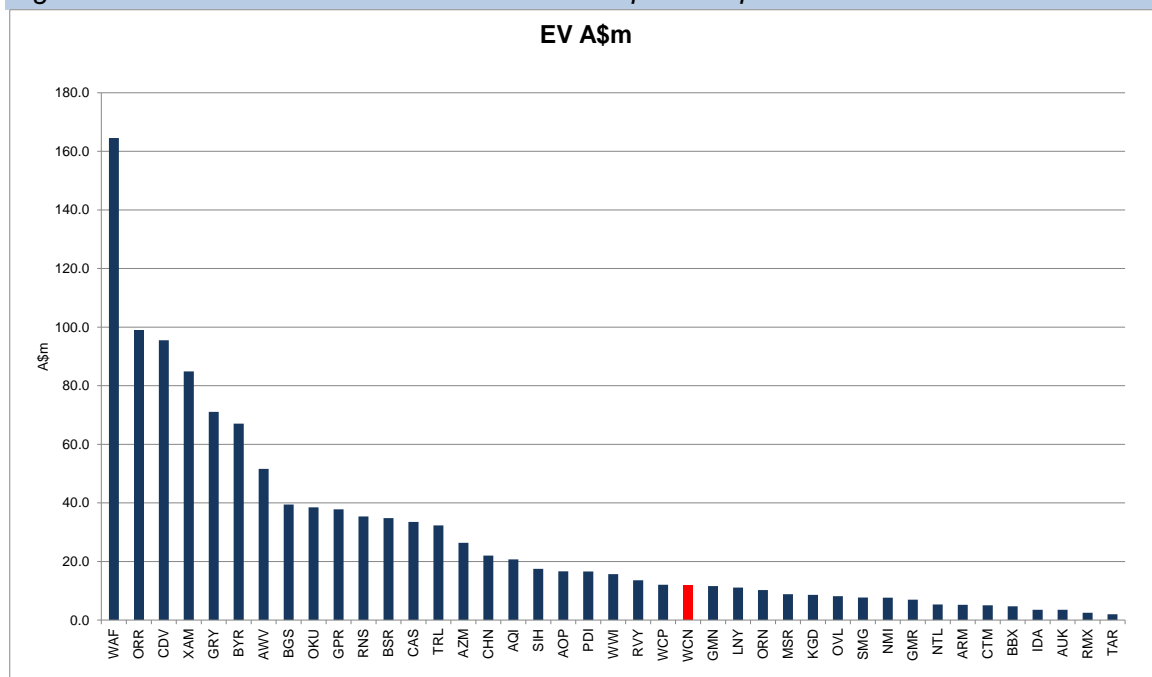
The Company's current resource at Aucu is expected to expand significantly through drilling in 2016. The Exploration Target on the Upper Gold Zone East (UGZE) alone is for 1-2Mt grading 15-30g/t Au for 0.5-1.2Moz potential.

Fig. 14: ASX-listed International Gold Developers/Explorers – Market Cap



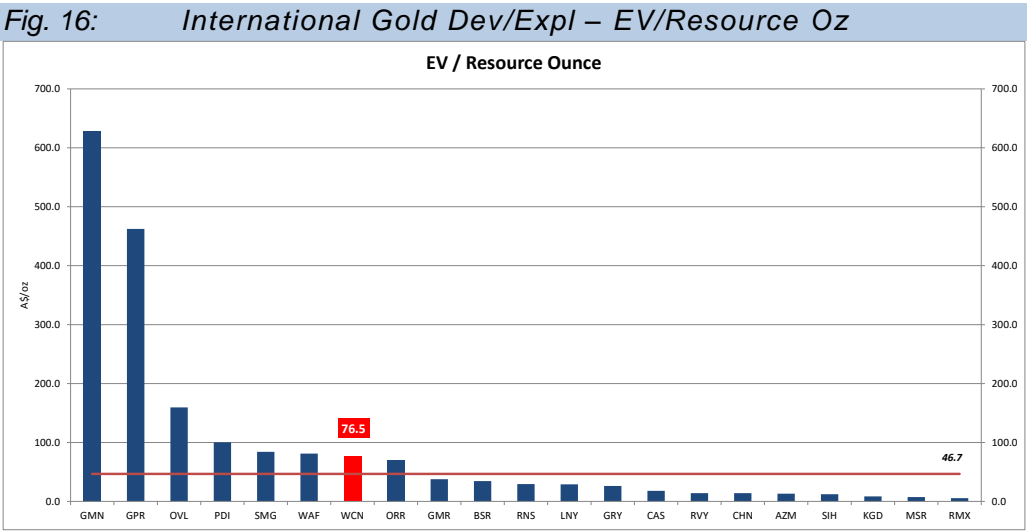
Source: Hartleys Research; GoldNerds

Fig. 15: ASX-listed International Gold Developers/Explorers – EV



Source: Hartleys Research; GoldNerds

WCN is currently trading at A\$76 per Resource Oz



Source: Hartleys Research; GoldNerds

RESERVES & RESOURCES

Aucu Gold Deposit

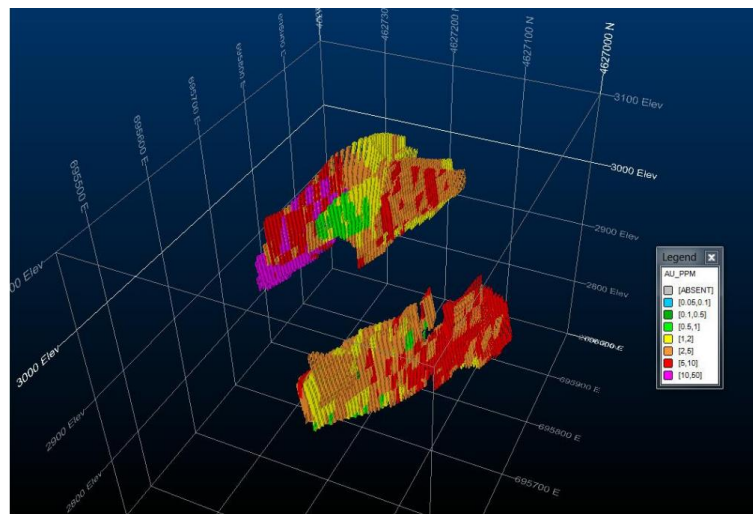
No current reserves

The maiden Inferred resource of 1.15Mt at 4.2 g/t Au for 156Koz (cut-off grade of 1g/t Au). The current Aucu resource occurs as two mineralised zones, named the Lower Gold Zone (LGZ) and the Upper Gold Zone (UGZ), both hosted within sandstone.

Fig. 17: Aucu resource – March 2015

Area	Category	Tonnes	Grade g/t	Gold (oz)
LGZ	Inferred	685,000	3.62	80,000
UGZ	Inferred	467,000	5.06	76,000
Total	Inferred	1,152,000	4.20	156,000

The Aucu Inferred resource is expected to expand significantly through drilling in 2016



Source: White Cliff Minerals Limited; 1g/t Au lower cut

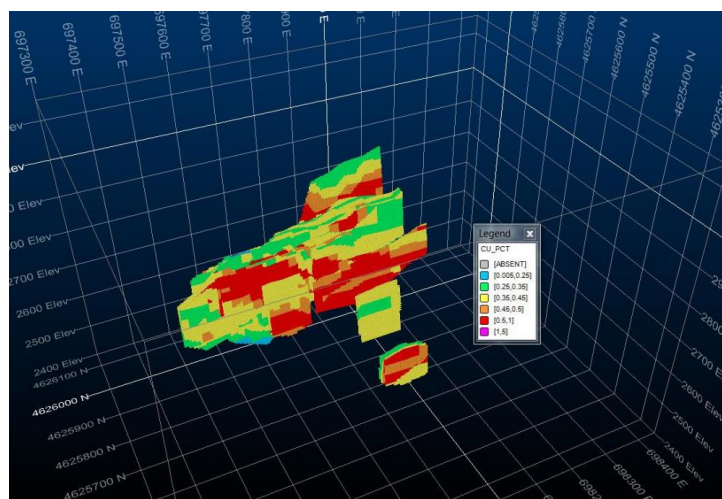
Chanach Copper Deposit

Chanach contains ~40Kt of contained copper

The Chanach copper deposit has been reported at a cut-off of 0.25% copper and occurs within granodiorite porphyry.

Fig. 18: Chanach resource – March 2015

Area	Category	Mt	Grade % Cu	Copper (t)
Chanach	Inferred	10	0.41	40,000



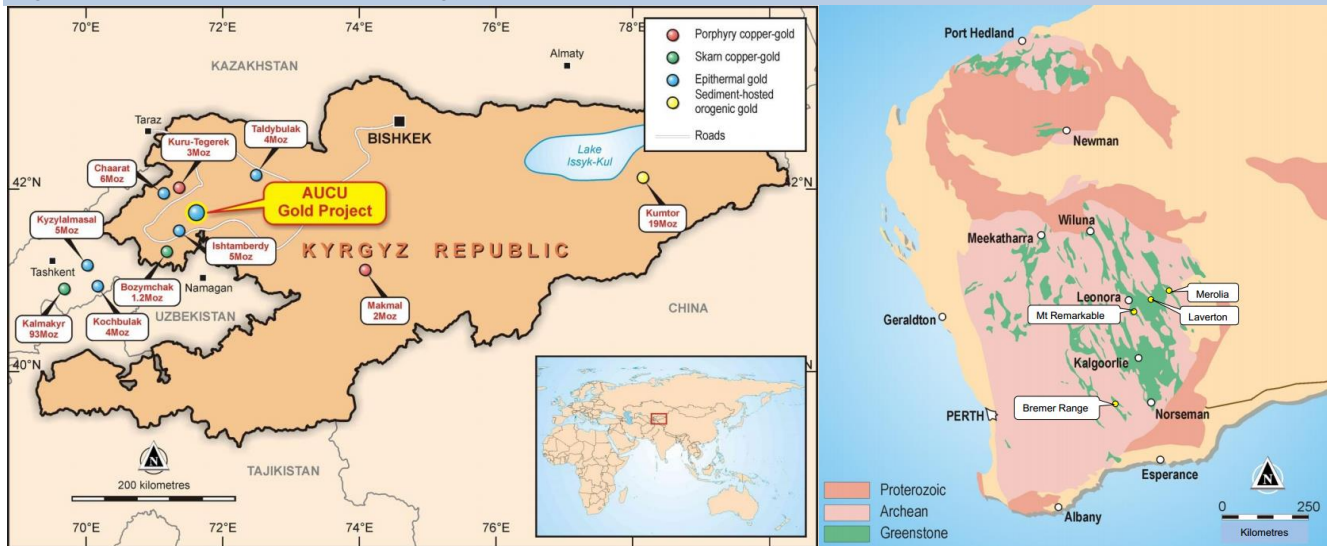
Source: White Cliff Minerals Limited; 0.25% Cu lower cut

GEOGRAPHIC EXPOSURE

*Exploration focus is in
the Kyrgyz Republic*

White Cliff is currently focused on projects located within Western Australia and the Kyrgyz Republic. The Company's flagship project the Aucu gold project is located in the Kyrgyz Republic.

Fig. 19: Project Locations – Kyrgyz Republic (LHS) and Western Australia (RHS)



Source: White Cliff Minerals Limited

DIRECTORS AND KEY PERSONNEL

Economic Exposure of Board and key management				Total	
	Position	Total Shares	Total Options	Performance Rights	Economic Exposure rank
Directors					
Michael Langoulant	Non-Exec Chairman	25,651,446	6,666,668	11,000,000	43,318,114 2
Todd Hibberd	Managing Director	34,397,736	9,666,668	11,000,000	55,064,404 1
Rodd Boland	Non-Executive Director	5,760,000	2,750,000	1,500,000	10,010,000 3
Key Management Personnel					
Undisclosed		na	na	na	na
Total		65,809,182	19,083,336	23,500,000	108,392,518

Source: White Cliff Minerals Ltd

Directors

From White Cliff's (WCN) website

Michael James Langoulant (Executive Chairman)

Mr Langoulant is a Chartered Accountant with over 20-years experience in public company corporate administration and fundraising. He has acted as finance director, CFO, company secretary and non-executive director with a number of publicly listed resource companies.

He is currently an executive director of ASX/AIM listed Nyota Minerals Limited. Mr. Langoulant's initial experience was gained through 10 years with large international accounting firms. Since 1994 he has operated his own corporate consultancy firm.

Todd Hibberd (Managing Director)

Mr Hibberd is a geologist with an extensive background in exploration and mining including 15 years in exploration, resource estimation, mine development and production management. Recent experience includes two years as Managing Director of ASX listed Stonehenge Metals Limited and ten years working for Newmont Mining Corporation in various senior exploration and production roles.

Mr Hibberd holds a Bachelor of Science (Hons) in Geology from the University of Canterbury and a Master of Science in Mineral Economics from Curtin University. Mr Hibberd is member of the Australasian Institute of Mining and Metallurgy has sufficient experience to be considered a "Competent person" when reporting resources and reserves according to the Joint Ore Reserve Committee (JORC) guidelines.

Rodd Boland (Non-Executive Director)

Mr Boland is a corporate advisor with over 20 years of corporate and financial industry experience in investment banking, executive management and the capital markets including advising to and raising equity for corporations in the form of venture capital, private equity, seed offering and initial public offerings.

Recently, Mr. Boland has been engaged in a corporate advisor role with the Sydney based merchant bank Emerald Partners where he has assisted in the successful IPO's of Laconia Resources Ltd, Rubianna Resources Ltd and Raisama Ltd. Mr. Boland holds a Bachelor of Commerce from the University of NSW, Sydney and an MBA from the University of Notre Dame, South Bend Indiana, USA.

Board and founders
own significant
proportion of company
~4.3%

MAJOR SHAREHOLDERS

SUBSTANTIAL SHAREHOLDERS

White Cliff has one substantial shareholder: ADE Super Fund (Mr Andy Igo) has ~320m in WCN or ~20.95% (29 July 2016). White Cliff Board holds ~4.3% of the ordinary shares on issue.

Top 20 shareholders

*ADE Super Fund is
the largest
shareholder*

Fig. 20: WCN Top 20 Shareholders – 29 July 2016

Shareholder	Shares	Held(%)
1 MR ANDY IGO <ADE SUPER FUND A/C>	320,000,000	20.95
2 MR MARK ANDREW TKOCZ	43,500,000	2.85
3 MR ADRIAN TREVOR BANDUCCI	33,666,666	2.20
4 HAMPSHIRE AUTOMOTIVE CENTRE PTY LTD	25,468,701	1.67
5 TERRA AQUA PROPRIETARY LIMITED <TERRA VERDE A/C>	17,545,349	1.15
6 SOUTHERN TERRAIN PTY LTD <SOUTHERN TERRAIN A/C>	17,366,529	1.14
7 MAX JOHN SUPER PTY LTD <JOHN SUPER FUND A/C>	16,700,000	1.09
8 HEBEI MINING (AUSTRALIA) PTY LTD	16,400,000	1.07
9 MRS TAOYUN LUO	16,000,000	1.05
10 TERRA AQUA PTY LTD <TERRA ROSSO A/C>	15,352,387	1.01
11 BB CAPITAL PTY LTD	15,000,000	0.98
12 MR ROGER HEALEY	14,100,000	0.92
13 JAYTU PTY LTD <J W GARDNER SUPER FUND A/C>	13,500,000	0.88
14 LANZA HOLDINGS PTY LTD <LANGOULANT FAMILY S/F A/C>	13,185,609	0.86
15 MR A GLASS + MRS J E GLASS <A & JE GLASS SUPER FUND A/C>	12,500,000	0.82
16 CITICORP NOMINEES PTY LIMITED	11,660,000	0.76
17 MR GUY LANCE JONES <BOQ LOAN A/C>	10,606,063	0.69
18 MR IAN HUGHES TULLY	10,073,203	0.66
19 MR JIM SBOUNIAS	10,000,000	0.65
20 MR IAN DAVIES	9,900,000	0.65
	642,524,507	42.05

Source: White Cliff Minerals Ltd

OPTIONS

The Company currently has 334.9m option convertible at 2.7cps which could provide an additional A\$9.1m. Options coming due mid December 2016 could bring in \$1.65m. Currently the options are near the money.

Fig. 21: Options on issue or to-be-issued

Expiry	Exercise Price	Number of shares	\$m unpaid capital
Dec-16	\$0.02	110,000,000	1.65
Mar-17	\$0.03	102,050,017	3.06
Dec-17	\$0.02	202,850,000	4.06
Dec-18	\$0.01	30,000,000	0.36
Total	\$0.027	334,900,017	9.13

Source: White Cliff Minerals Ltd

*As an explorer, we
anticipate the
Company will run at a
loss and require
further funding*

RECENT EQUITY ISSUANCE

The Company last raised new equity in late April 2016, raising \$2.64m through the issue of 440m new shares at 0.6cps. Options were also issued to participants in the placement receiving one attaching option for every four shares subscribed; exercisable at 1.5cps on or before 15 December 2016. We expect further capital raisings this year.

PROFIT & LOSS

Given that White Cliff Minerals is an emerging mineral explorer, its financial performance is a reflection of a company where funds raised are spent in search of mineral deposits.

The Company has ~\$1.8m of cash.

DEBT AND HEDGING

The Company has no debt or hedging and, as an explorer, we don't anticipate any.

RECOMENDATION

PRELIMINARY PRICE TARGET

Our White Cliff valuation and price target is considered highly speculative.

Our WCN valuation and price target is considered highly speculative

We consider Aucu to be in the advanced stages of exploration, with both gold and copper discoveries, and initial JORC resources released for the Aucu gold deposit and Chanach copper deposit. In addition, the Company has multiple exploration targets to test overtime, which could provide additional discoveries and ultimately increase resources and potential mining inventory.

We consider WCN to be a high risk/high reward investment given its an early stage nature

We model (simulation only) a potential +0.8Moz mining inventory (mid-point of exploration target) mined via open pit at high grades (+5g/t Au), using estimated opex and capex based largely on comparable small-scale operation, at a production rate of ~80Kozpa over an 8 year mine life. We stress this is highly speculative and assumes the current Aucu resource grows towards the exploration target size, and can be converted to a mining inventory, and ultimately the project can be successfully funded into production. Capex of a project of this size is expected to be light (ie <US\$100m), due to the anticipated grade of the deposit and characteristics of the ore (simple gravity concentration and conventional leaching). All these assumptions are our estimates only, and are subject to change.

12-month price target of 4.0cps

Our preliminary assessment of potential value (NPV₁₅) for the Aucu gold project is A\$98.9m (or 5.2cps), which assumes a favourable resource conversion into a mining inventory and feasible development studies, which we stress is speculative at this stage and will be updated as studies are progressed. We remain of the opinion that the gold deposits can be monetised, and if Aucu can increase in size as expected then a standalone operation could be a reality and key value driver.

A discount rate of 15% is used, since it is pre-scoping. Our price target is 4.0cps is derived from both a discounted cashflow analysis of a small-scale gold operation at Aucu and perception of exploration value in the search of other gold and base metal deposits.

Fig. 22: Hartleys WCN Price Target

WCN Price Target Methodology	Weighting	10/08/2016	12 mth out
Aucu Gold (NPV @15) - risked +0.8Moz @ +5g/t Au OP	60%	\$0.052	\$0.058
Preliminary Unrisked Valuation on Peer Metrics	25%	\$0.016	\$0.019
Net Cash Backing	15%	\$0.001	\$0.001
Risk weighted composite		\$0.036	\$0.040
12 Months Price Target		\$0.040	
Shareprice - Last		\$0.009	
12 mth total return (% to 12mth target + dividend)		340%	

Source: Hartleys Estimates

RISKS

Key risks for White Cliff include country risk, making an economic discovery and obtaining funding for ongoing exploration. Weather, land access, drill rig availability, retaining key people are all risks.

Fig. 23: Key Risks

Assumption	Risk of not realising assumption	Downside risk to shareprice if assumption is incorrect	Comment
Funding for ongoing exploration	Low-Med	Med-High	We estimate WCN has a current cash position of less than \$2.0m. If so required WCN has a number of options to raise additional funds for ongoing exploration, including new equity issuances and potential new JV deals. The Company continues to operate under a lean cost structure.
A high-grade deposit can be defined	Low-Med	Med-High	WCN is still in the resource extension stage for Aucu. Drilling is underway and will determine if the mineralisation "hangs together" to grow the current resource. An updated resource is expected before the end of CY16. Disappointing drill results and/or resource release in regards to size and grade could have negative effect on share price and prospect of future development.
Model parameters for our preliminary WCN valuation and price target	Med	Meaningful	We have made a number of large assumptions in our WCN preliminary valuation, based on incomplete information (ie no reserves, or development studies). WCN has no production history. Any changes to our assumptions have both upside and downside risks.
No political/civil unrest	Low-Med	Extreme	Kyrgyz Republic remains politically stable but we increase our risk outlook during election periods.
Change to fiscal regime	Low-Med	Moderate	Potential changes to the current fiscal regime, could impact our valuation.
Commodity prices	Med	Med-High	The project remains highly sensitive to commodity price movements and sentiment. The Company's exploration focus is gold, copper and nickel.
<i>Conclusion</i>	<i>At this stage we consider the assumptions have a low to medium risk of not being achieved. We have no valuation or price target on the Company.</i>		

Source: Hartleys Research

SIMPLE S.W.O.T. TABLE

Strengths	<ul style="list-style-type: none">- <i>High-grade gold resource, growing in size</i>- <i>Share price currently factors limited success</i>- <i>Very good grade and metallurgy (high recoveries)</i>- <i>Moderate hardness ores should have ease of liberation</i>- <i>Technical expertise</i>
Weaknesses	<ul style="list-style-type: none">- <i>No development studies</i>- <i>Dependant on capital markets</i>- <i>No cash flows, so funding ultimately required for exploration</i>- <i>No reserves</i>
Opportunities	<ul style="list-style-type: none">- <i>Exploration Upside</i>- <i>Exposure to commodity price increases</i>
Threats	<ul style="list-style-type: none">- <i>Country risk (perceived)</i>- <i>Exposure to commodity price decreases or closed capital markets</i>- <i>Predators for M&A</i>

Source: Hartleys Research

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Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative Buy	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.

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