



**Breakaway
Research**

July 2015

Grant Craighead | Research Manager
gcraighead@breakawayinvestmentgroup.com

Mark Gordon | Senior Research Analyst
mgordon@breakawayresearch.com

www.breakawayresearch.com

Company Information

ASX Code	CAV
Share Price (23 July 2015)	A\$0.033
Ord Shares	256.28m
In-money options	186.71m
Out of money options	0.00m
Performance Shares	42.0m
Market Cap – diluted for in-money options	A\$14.62m
Cash (30 June 2015 est.)	A\$1.40m
Cash on option conversion	A\$5.60m
Total Debt	A\$0m
Enterprise Value	A\$7.62m

Directors and Management

Non-Exec Chairman	Ron Gajewski
Managing Director	Andrew Beckwith
Non-Executive Director	Rhett Brans
Non-Executive Director	Andrew Chapman

Company Details

Address	Level 1, The Business Centre 55 Salvado Road Subiaco WA 6008
Phone	+618 9380 9098
Web	www.carnavaleresources.com

Top Shareholders

JP Morgan Nominees Australia	15.57%
Vienna Holdings Pty Ltd	6.62%
Andrew Beckwith & associates	6.31%
Mr Michael Lynch	4.27%
McNeil Nominees Pty Ltd	3.56%
Top 20	52.5%
Directors and Management	17.8%

1 Year Price Chart



Source: IRESS

Carnavale Resources (CAV)

Is the Rattler About to Strike?

Recommendation: Speculative BUY

Key Points

- **Fully funded drilling programme imminent on key Rattler and Cobra poly-metallic targets at the Red Hills Project in eastern Nevada**
- **Sampling by Carnavale and historic mining confirms the presence of high grade shear hosted mineralisation**
- **Work to date also indicates the potential for a large tonnage resource**
- **Red Hills is also prospective for Carlin-style mineralisation, and lies on the underexplored eastern end of the Carlin trend**
- **Copper-gold potential at the Little Butte Project in western Arizona**

Carnavale is commencing drilling on shear hosted poly-metallic targets at their Red Hills Project, where they are earning up to 75% through an earn-in agreement. The Project is located in Nevada, a well-known and relatively mining friendly jurisdiction.

Sampling and mapping by Carnavale over historic workings has confirmed the high grade nature of the mineralisation, and a mid-point exploration target (100% basis) of 12Mt has been estimated over the two targets. Our calculations indicate a zinc equivalent grade of around 22% based on the recent sampling. Estimates of mineralisation thickness range between 4 and 20m.

Red Hills is also prospective for Carlin-style mineralisation – soil sampling at Viper has returned a Carlin-style geochemical signature, and is situated in a similar structural and lithological setting as that for both the Kinsey and multi-million ounce Long Canyon deposits located to the north.

We rate Carnavale as a SPECULATIVE BUY, with short term price movers being positive results from the imminent drilling.

Company Overview

Carnavale Resources Limited (ASX: CAV) is an Australian based junior explorer concentrating activities on the Red Hills Project in eastern Nevada. Red Hills saw small scale mining of the high grade shear hosted poly-metallic mineralisation in the early 1900's. Since acquiring the project in 2013 the Company has made steady progress and has now defined a number of drill targets which will be tested in upcoming weeks. The Project also has Carlin-style potential, which the Company is currently assessing.

The second project, Little Butte, for which Carnavale is earning 100%, is located in western Arizona. Work by the Company and previous explorers has defined a low grade copper-gold supergene blanket, with further work now required to determine the primary source of this mineralisation.



Investment Thesis

Drilling imminent on highly prospective poly-metallic targets

Drilling Imminent on Key Poly-Metallic Targets

At the Red Hills Project (“Red Hills” or “the Project”), Carnavale Resources (ASX: CAV, “Carnavale” or “the Company”), is about to commence drilling on two shear-hosted poly-metallic targets that in our view have a good chance of returning impressive grades, and of hosting a significant resource.

Prospectivity confirmed by work to date, including historic mining

Previous Work Shows Excellent Prospectivity

Historic mining, and work by Carnavale shows the potential of the Rattler and Cobra targets, with average grades of surface and underground sampling in the order of 22% Zn equivalent. The work has also shown the potential for strike lengths in the order of 400m at both targets, and true vein/shoot widths of between 4 and 20m.

Five hole, 1,200m drill programme to test below historic workings

Dip Extent to be Tested

The drilling programme, comprising five holes for 1,200m, will include two holes at Rattler, and three at Cobra testing up to 150m below the historic workings. Given the style of mineralisation, there is a good chance for good vertical continuity as exhibited by similar deposits globally.

Positive results from the drilling will point towards the potential for significant, high grade resources

Potential For a Significant Resource

Should the drilling be successful, given the nature of mineralisation seen in the workings, there is the potential with further drilling to define a significant resource – the Company has a midpoint exploration target of 12Mt (9Mt attributable to Carnavale), with the lower end tonnage being 4.8Mt. Given the sampling grades this lower tonnage has the potential to deliver a resource with an in-ground value equivalent to 1.1Mt contained Zn (or 1.9Moz Au) based on current metal prices) resource.

Work to date also supports the prospectivity for Carlin-style mineralisation

Prospective For Carlin-Style Mineralisation

The second target mineralisation style at Red Hills is Carlin-style gold mineralisation. The project is located at a similar lithological and structural setting to that hosting both the Kinsley and Long Canyon deposits to the north, and the results of soil sampling at the Viper prospect have affirmed this prospectivity, returning anomalies with a Carlin-like Au/As/Ag geochemical signature.

Eastern Nevada is relatively under-explored

Underexplored Region

Compared to the Carlin district and western Nevada in general, eastern Nevada is generally underexplored – the larger companies, which dominate activities, have concentrated activities around areas of the known deposits (particularly Carlin-style). Recent discoveries, such as Long Canyon initially discovered in the 1990’s, with appreciable resource expansion in the 2000’s have shown the potential of eastern Nevada.

Upside at Little Butte in Arizona

Upside at Little Butte

We still see potential for a breakthrough at Little Butte in Arizona, which remains a puzzle, with no primary source for the supergene copper-gold blanket at the Railway prospect as yet to be determined. This prospect does require further work and geophysical surveys are being undertaken to elucidate the potential source.



World Class Mining Destination

Both Nevada and Arizona are world-class mining destinations

Nevada is a world class mining district that produces approximately 75% of the USA's annual gold output. The State has produced over 150Moz of gold, largely over the last 30 years, and is a mining friendly jurisdiction. Arizona similarly is a world class mining district, producing some 65% of the USA's copper output. Both have similar, well understood (if at times frustrating) mining regimes, that have operated for a well over a century.

Potentially Well-Funded

Drilling is fully funded, with possible future funding from in-money options

The current drilling programme has been funded through a recent placement which raised A\$650,000 before costs. In addition, the Company has, as of the date of this report, 187 million 3c unlisted options on issue, currently in the money, with the capacity to bring in \$5.6 million in cash.

Strong, Committed and Incentivised Board and Management

Principals hold significant shareholdings

The Board and Management have extensive industry experience in varied regions and commodities, including gold operations. In addition directors hold significant shareholdings, and thus will be motivated to producing strong returns for shareholders.

Peer Comparison

Carnavale is one of a number of ASX-listed juniors looking at poly-metallic resources

We have included in our peer group junior ASX-listed poly-metallic and base metal explorers, developers and producers. Here we have calculated a Zn equivalent grade for resources, using current metal prices, as well as the in-ground value of the resources to provide a comparison between companies – we have not factored in potential recoveries.

Of these, both Auralia and Peel Mining have shear-hosted mineralisation, albeit of the Cobar style, and not totally analogous to Red Hills.

Carnavale Resources Peer Comparison (All figures in AUD)

Company	Project	EV Undiluted (\$m)	Global Resource (Kt)	Equity Resource (Kt)	ZnEq Grade (%)	IGV/t resource	Contained ZnEq kt Equity basis	EV/T ZnEq (company share)	Key Project Stage	Metals (all resources)
Auralia Metals	Hera, Nymagee	\$109.3	2,506	2,506	15.39%	\$425	385.64	\$283	Hera - Production Nymagee - FS	Cu, Pb, Zn, Ag, Au
Peel Mining	Mallee Bull	\$28.2	3,900	1,950	7.47%	\$206	145.65	\$194	Drilling, Resource Expansion	Cu, Pb, Zn, Ag, Au
Terramin	Angas, Tala Hamza	\$342.1	77,580	53,570	5.81%	\$160	3,112.72	\$110	FS - Hamza C & M - Angas	Zn, Pb
Red River Resources	Thalanga	\$21.8	3,800	3,800	14.74%	\$407	560.31	\$39	Restart	Cu, Pb, Zn, Ag, Au
KBL Mining	Mineral Hill	\$39.1	21,380	17,455	6.94%	\$191	1,210.57	\$32	Production	Cu, Pb, Zn, Ag, Au
Rox Resources	Reward	\$17.7	43,600	22,236	4.93%	\$136	1,097.10	\$16	Exploration	Zn, Pb
Phoenix Copper	Pine Creek	\$5.5	2,605	2,605	13.51%	\$373	352.03	\$15	Drilling, Resource Expansion	Cu, Pb, Zn, Ag, Au
Ironbark	Citronen	\$31.5	70,800	70,800	5.58%	\$154	3,950.51	\$8	Feasibility	Zn, Cu, Pb
Heron Resources	Woodlawn	\$13.8	24,770	24,770	9.41%	\$260	2,331.05	\$6	Feasibility	Cu, Pb, Zn, Ag, Au
Venturex Resources	Sulphur Springs	\$6.4	18,370	18,370	6.83%	\$189	1,255.05	\$5	Feasibility	Cu, Pb, Zn, Ag, Au
Carnavale Resources	Red Hills	\$7.2	12,000	9,000	21.50%	\$593	1,935.44	\$4	Drilling	Cu, Pb, Zn, Ag, Au
Overland Resources	Yukon	\$1.5	12,560	12,560	6.05%	\$167	759.26	\$2	Feasibility	Zn, Pb
Metalicity	Admiral Bay All	\$6.4	72,000	72,000	6.09%	\$168	4,387.61	\$1	PFS	Zn, Pb, Ag

Source: IRESS, Company reports

* Aurelia – Metal calculations based on Hera deposit only

* Carnavale – Midpoint of Rattler/Cobra exploration targets



Based on the exploration target, Carnavale has a high per tonne in-ground value

For Carnavale we have used the midpoint of the exploration target to get some idea of potential comparative enterprise values per unit of contained metal. One thing to consider is the relatively high IGV/t of Red Hills using the exploration target, although this does need to be treated with care given that the grades are based on limited sampling, and this a target only, whereas other companies figures are based on JORC-compliant resources. Also overall the EV/T metric does need to be treated as a guide only – there are any numbers of factors that can affect this figure.

Risks

As in any resources stock there are a number of risks involved as listed below – we consider exploration to be the key risk here.

The key risk is exploration risk

- **Exploration** – This is the key risk at both Red Hills and Little Butte. Although historic work at Red Hills indicates excellent exploration potential, there is always the chance that the mineralisation may not behave as predicted. Although the interpretation and exploration targets are predicated on extensive down-dip and along strike continuity of the mineralisation (which is common in these styles of systems), any number of geological factors have the potential to “spoil the party”.
- **Funding** – We would consider future funding only a risk if the drilling doesn’t deliver; otherwise, given the potential of the project and also the options on issue we see no significant risk here.
- **Permitting and Sovereign Risk** – Given the known mining jurisdictions we consider these as low risk in the case of Carnavale



Project and Activities Review

Carnavale has acquired rights to Red Hills and Little Butte through the acquisition of Tojo Minerals

Introduction

Carnavale has acquired its key USA projects through the February 2015 completion of the acquisition of Tojo Minerals Pty Ltd (“Tojo”), a private Australian company. These assets are agreements to acquire up to 75% of the Red Hills Project in eastern Nevada and 100% of the Little Butte Project in western Arizona. Tojo was set up for the purposes of project acquisition by Andrew Beckwith and Andrew Chapman, who became directors of Carnavale in August 2014 and March 2015 respectively.

Project Location



Source: Carnavale Resources

Under the terms of the agreement Carnavale issued Tojo shareholders 10.5m shares as an option fee, and a further 21 million shares for the acquisition of 100% of Tojo. In addition 42 million performance share have been issued on the following terms:

- On defining a JORC Code compliant indicated mineral resource of not less than 500,000 ounces of gold or gold equivalent at greater than or equal to 0.8g/tonne gold or gold equivalent in respect of the Arizona Project or if a decision to mine is made based on a preliminary feasibility study on the Arizona Project within 3 years, 21M performance shares will convert to fully paid shares; and
- On defining a JORC Code compliant indicated mineral resource of not less than 500,000 ounces of gold or gold equivalent at greater than or equal to 0.8g/tonne gold or gold equivalent in respect of the Nevada Project or if a decision to mine is made based on a preliminary feasibility study on the Nevada Project within 4 years, 21M performance shares will convert to fully paid shares.

Both Red Hills and Little Butte are located over highly prospective areas of the western USA

Both projects are located in highly prospective areas – Red Hills, prospective for precious and base metals is located on the world class Carlin Gold Trend in the Basin and Range Province, and is marked by historically mined poly-metallic shear-hosted mineralisation with an overprint of Carlin style surface geochemistry that is yet to be tested.

Little Butte, prospective for copper and gold is again located over the Basin and Range Province. Little Butte is marked by an extensive gold-copper supergene blanket tested by drilling, however due to deep weathering (similar to that in Australia) no primary mineralisation has yet been defined. The primary mineralisation style is as yet undetermined.



Red Hills (CAV earning 75%)

Red Hills is located on the eastern end of the Carlin trend

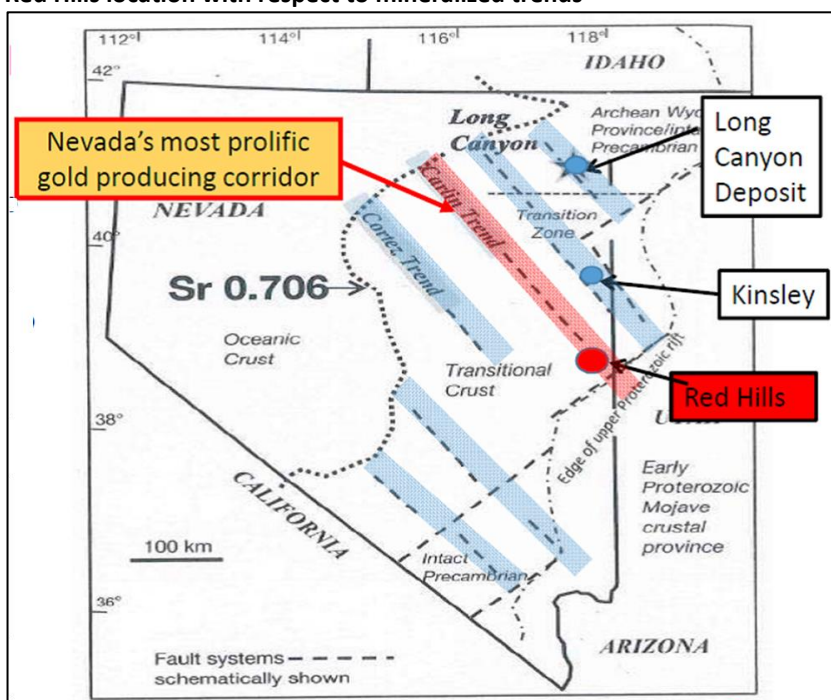
Carnavale has the right to earn up to 75% of Red Hills through the expenditure of US\$9 million over 7 years

Introduction and Tenure

Red Hills is located approximately 400km north of Las Vegas in eastern Nevada on the world class Carlin Trend. The project, which covers around 13.4km², comprises 98 lode claims, which, following the recent acquisition of Tojo, Carnavale has a right to earn 75% in a joint venture with Columbus Gold Corp (TSX-V: CGT). Key terms of the agreement include:

- Spend US\$2 million to earn 51% within three years
- Expenditure of an additional US\$7 million within a further four years to increase equity to 75%
- At 75% Columbus has the right to contribute pro-rata, else revert to a 2% NSR.
- Carnavale has the right to buy down Columbus' NSR to 1% for US\$2 million; this also applies to a 2% NSR currently held by a second partner.

Red Hills location with respect to mineralized trends



Source: Carnavale Resources

The Carlin trend is Nevada's most prolific gold-producing corridor

Geology

Red Hills is located over a package of Cambrian to Devonian carbonate and clastic sedimentary units, representing a shelf sequence of an ancient passive continental margin at the western edge of the North American craton. These units have undergone a number of orogenic events with associated granite emplacement and volcanism throughout the Palaeozoic to Tertiary.

Red Hills is located over Cambrian to Devonian sediments that have been subjected to a number of orogenic events and periods of igneous activity

The first compressional event, the Antler Orogeny, is estimated to have occurred in the late Devonian to Early Carboniferous. This was followed by the mid to late Carboniferous Humboldt, Early Triassic Sonoma and Early Cretaceous Sevier progenies. These orogenic events were separated by periods of chemical and clastic sedimentation.

Regionally, the repeated compressional events have resulted in structural complexity, including the formation of N-S striking, west dipping imbricate thrust sheets and the associated thrust surfaces, as well as the series of NW striking, steeply dipping structural zones considered as vital controls for mineralisation, and which form the major mineralised trends in Nevada as shown in the figure above.



The latest tectonic event is an E-W extensional event that has continued from the Miocene to recent times, forming the current basin and range topography, which comprises a series of N-S trending mountain ranges separated by basins.

The region has also been subject to a number of significant periods of volcanism; 170-155Ma (Mid-Late Jurassic), 41-39Ma (Mid-Eocene) and 25-13Ma (Late Oligocene to Mid Miocene).

Regional Mineralisation

The dominant mineralisation style mined in Nevada in recent years is Carlin-style gold, with a total mineral endowment (including past production) of over 150Moz, making it the largest gold accumulation in the United States and the fourth largest in the world. Mineralisation is both structurally and lithologically controlled, and is fine-grained (commonly <1µm), associated with pyrite and arsenopyrite. Preferential host rocks are calcareous sedimentary rocks, which have been altered by the circulating meteoric fluids, with reactions leading to the deposition of gold and silver. Key mineralisation sites include the intersection of structures and suitable host sediments and fold hinges, with major structures acting as fluid pathways.

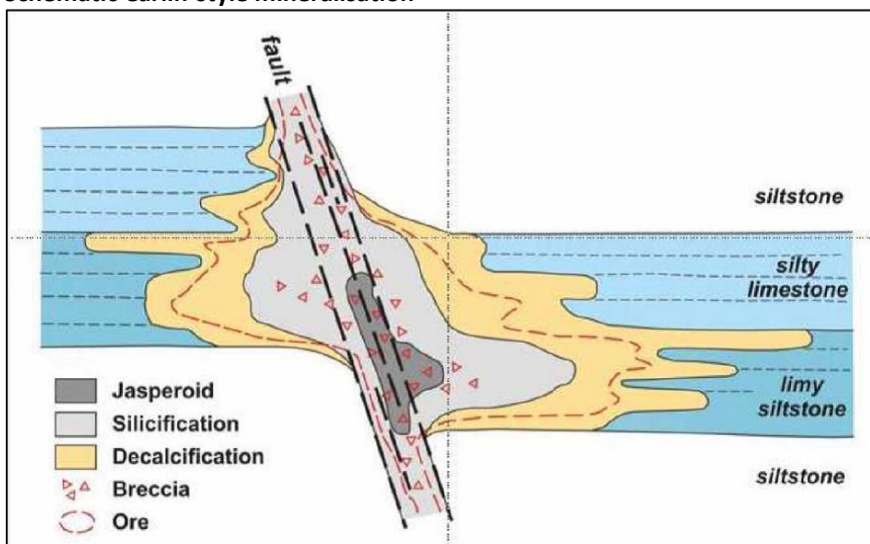
The key drivers of the hydrothermal systems are believed to be the ~40Ma granites, with the emplacement of these being largely controlled by the NW trending deep crustal structures, giving rise to the mineralised gold trends.

The major mineralisation style in Nevada is Carlin-style gold mineralisation

Mineralisation is both structurally and lithologically controlled

The key drivers of mineralisation are interpreted as being ~40Ma granites

Schematic Carlin-style mineralisation



Source: Robert et al 2007, in Kinsley NI43-101, March 26, 2012

The bulk of Carlin-style deposits are located to the west of Red Hills

More recent discoveries have been made in the eastern part of Nevada

The majority of the recognised Carlin-style deposits are located further to the west in younger rocks than those at Red Hills, with the eastern parts of the trends being underexplored. The originally recognised Carlin style deposits were discovered in the 1960's – there were also a number of previous operations in which the style was not recognised as such.

More recent discoveries, including Kinsley and Long Canyon, indicate that the eastern areas are also prospective. Mineralisation at Pilot Gold's Kinsley project, located some 60km north of Red Hills and 90km south of Long Canyon (and on the intermediate NW trend) is hosted in similar units to that at Long Canyon as shown below.

Sediment-hosted gold was discovered at Kinsley in 1984, with approximately 135,000oz of gold being produced from 1995 to 1999 when owned by Alta Gold Company. The mine closed due to low gold prices.

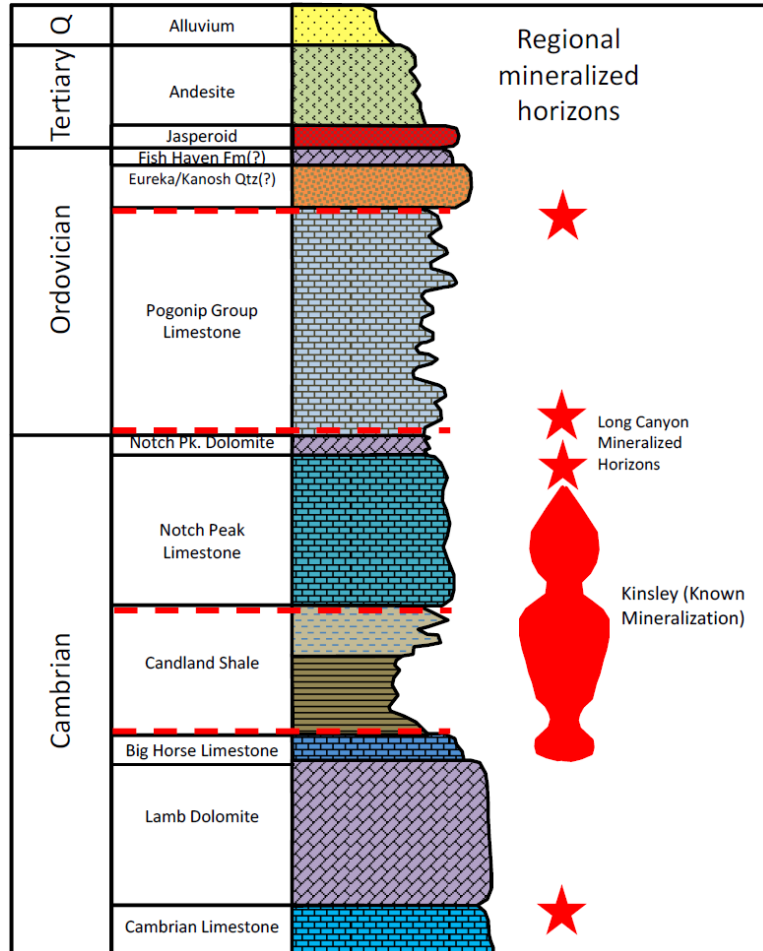
More recent was the discovery of Long Canyon initially in the 1990's, with this being



Carlin-style mineralisation at Kinsley and Long Canyon is at similar structural and lithological settings to Red Hills

located approximately 150km east of the established Carlin deposits. The 2.6Moz (and growing), ~2g/t Long Canyon resource, acquired by Newmont when it acquired Frontier Resources for US\$2.3Bn in 2011 is located over deformed sediments dominated by carbonate shelf units ranging in age from Middle Cambrian to Lower Ordovician. As well as being similar to those at Kinsley, these are also similar to units at Carnavale's Red Hill property, located approximately 150km along strike to the south.

Comparison of Long Canyon and Kinsley mineralised stratigraphic positions



Source: Kinsley NI43-101 - 2012

The Company has obtained preliminary quotes for the operation

The multi-phase igneous activity, in associated with strong structure and in places reactive rock units has given rise to a number of other mineralisation styles in Nevada. These include epithermal precious and base metal systems (e.g. the Miocene bonanza grade Comstock lodes), base, precious metal and tungsten skarns, porphyry molybdenum (e.g. Mt. Hope) and porphyry copper (e.g. Yerington). At Red Hills the known mineralisation is shear-hosted poly-metallic massive sulphide veins and breccias, possibly proximal mineralisation related to more distal Carlin-style gold.

Red Hills Geology

Sedimentary units at Red Hills are generally mildly deformed, which are cut by a number of shear zones

As mentioned above the geology at Red Hills is dominated by a sequence of sheared and folded Cambrian to Devonian limestones, dolomites and siltstones, with these belonging to the Ordovician to Devonian Pogonip and Hanson Creek Groups, and the Cambrian Notch Peak Group. These are generally mildly deformed, with westerly dips of around 30° to 40°. Previous workers have also mapped a siliceous zone as the Ordovician Eureka Quartzite; work by Carnavale instead suggests that this may in fact represent silica flooding controlled by the two major largely N-S trending thrusts seen in the area.

The area is interpreted as being underplated by a 1.5km deep granite

Ground magnetics and gravity surveying indicates the presence of a ~1.5km deep granitic intrusion underplating the project area.

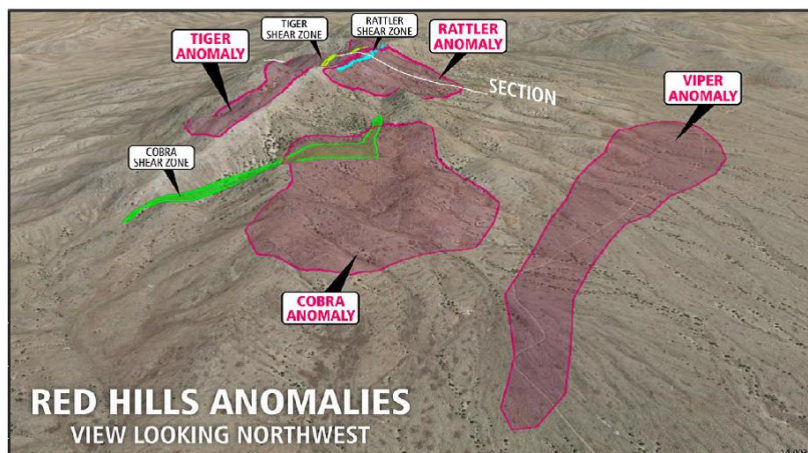


Red Hills Mineralisation

Known mineralisation at Red Hills includes poly-metallic mineralisation controlled by the thrusts. At Rattler these form a single shear zone potentially up to 20m wide; at Cobra a 100m wide thrust zone has been recognised, and is interpreted as a splay off the main Rattler thrust. Mineralisation and alteration styles include massive sulphides, breccias and strong silicification, with the silicification predominantly along the margins of the mineralisation. There are also small, high grade bedding parallel zones interpreted as forming where there is layer parallel slip due to folding.

Known mineralisation includes poly-metallic shear/thrust hosted poly-metallic sulphides

Red Hills mineralisation and soil geochemical anomalies



Source: Carnavale Resources

There is the potential for Carlin-style gold, driven by the granite causing the poly-metallic mineralisation

One interpretation is that the underplating granite has driven the mineralising fluids through the thrust zones, depositing the proximal poly-metallic mineralisation in the shears, and potentially giving rise to more distal Carlin-style mineralisation at the Pogonip/Notch Creek contact as reflected in the Viper geochemical anomaly.

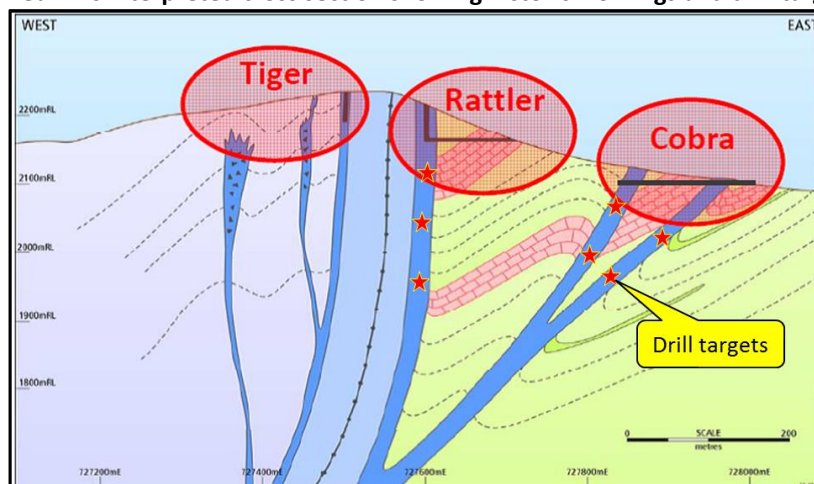
Previous Mining and Exploration – Red Hills

Small scale mining of oxide mineralisation in the shears was carried out at Red Hills from around 1908 to 1918, which included the development of a number of adits and shafts up to 50m deep at the Tiger, Rattler and Cobra shear zones/breccia pipes as shown below in blue. Mining was carried out over a strike length of over 250m at Rattler, and to a depth of at least 50m. At Cobra mining was undertaken along a 123m long adit along the contact between the shear and an altered dolomite.

Small scale mining of the poly-metallic mineralisation at Red Hill was carried out in the early 1900's

Limited reports give total production as 229oz of gold, 35,029oz of silver, 550lb of copper and 789,782lb of lead, with grades of up to 20% lead (or possibly lead+zinc).

Red Hills interpreted cross section showing historic workings and drill targets



Source: Adapted from Carnavale Resources

These include the main Rattler shear, and splays and breccias associated with this major structure



Previous exploration has included limited drilling, mapping and sampling

Columbus identified twelve rotary drill hole sites within the project area; with up to four possibly testing the Cobra thrust, however there are no further details on this work which is thought to have been carried out in the 1970's. This is a typical and frustrating situation in the USA – companies are not required to lodge results of work programmes with any agencies. Work carried out by Columbus included geological mapping, ground magnetic surveys and geochemical sampling.

Current Activities

Tojo/Carnavale has been active since acquiring the project in 2013. Work completed to date includes:

- Channel sampling and underground mapping/sampling at Rattler and Cobra
- Soil and rock chip sampling and mapping over the project area,
- Gravity survey and modelling
- Calculation of exploration targets at Rattler and Cobra.

Carnavale has carried out surface and underground mapping and geochemical sampling

The soil and rock chip sampling has identified and enhanced four geochemical zones, namely Tiger, Rattler, Cobra and Viper. The first three are associated with the known poly-metallic mineralisation along the shear zones; Viper has a Carlin-style geochemical signature at what is interpreted as the highly prospective contact between the Notch Creek and Pogonip Group sediments.

Soils have identified three poly-metallic anomalies and one Carlin-style anomaly

At Rattler the soil sampling indicates a potential strike length of 500m for the mapped shear, with an additional +600m strike length to the south indicated by a gold anomaly displaced slightly to the east. At Cobra the soil sampling has outlined a bifurcating zone some 650m long and up to 100m wide.

Surface channel sampling over the historic workings has returned high grade results, and indicated reasonable thicknesses of mineralisation

The surface channel sampling (perpendicular to the shear zones) has returned excellent results including:

- **+7.8m @ 0.5g/t Au, 105g/t Ag, 2.6% Zn and 2.6% Pb across the Rattler shear,** including 3.5m of high grade gossanous material grading at 1.1g/t Au, 205g/t Ag, 5.2% Zn and 5.9% Pb
- **+3.0m @ 0.6g/t Au, 317g/t Ag, 1.5% Cu 9.9% Zn and 4.0% Pb at Cobra.**

It should be noted that the Rattler sampling terminated within the mineralised zone due to scree cover, however a sample collected some 12m to the east of the channel sampling returned significant results, indicating the potential for a zone up to 20m wide.

Results of the surface sampling have been strongly supported by underground sampling (201 samples) and mapping at both Cobra and Rattler and two smaller workings at Tiger, which confirmed the strong structural control on mineralisation.

The results of the surface sampling have been supported by underground work, with the underground mapping and sampling providing more detail regarding the structure of the shear zones

At Cobra, this work included mapping along the NE trending 123m long adit and NW dipping stopes, confirming the interpretation that the Cobra Thrust Fault represents an easterly splay off the N-S trending Rattler Thrust Fault. The adit and workings follow the contact of the shear with an altered hanging wall dolomite unit.

The Cobra shear zone includes a sheared upper margin, and a main massive breccia zone, with a potential maximum thickness of >9m – the footwall contact of the thrust has not been observed on surface or in the workings. 36 samples were taken within the shear in the workings, with these averaging **0.67g/t Au, 494g/t Ag, 1.1% Cu, 3.6% Pb and 3.4% Zn**. An additional 88 samples were taken from the altered dolomite – these did not return significant assays.

Mapping at Rattler confirmed the presence of significant workings within three sub-parallel lodes, and noted stopes up to 10m wide. Due to safety issues sampling could not be carried out in the stopes, however sampling of the stope margins returned values of up



to **0.30g/t Au, 129g/t Ag, 0.7% Cu, 1.9% Pb and 1.0% Zn**. Although returning lower values than the surface sampling (mainly due to not being taken from the stopes) these show the poly-metallic nature of the mineralisation.

Exploration Targets

The Company has also (prior to the underground sampling) published exploration targets for both Rattler and Cobra, based on the sampling and mapping carried out to date. Tonnage ranges are :

Exploration targets have been calculated from the work today – although conceptual they indicate the potential for significant resources

- Rattler – 2.3-9.6Mt
- Cobra – 2.5-9.6Mt

The grade range based on the channel sampling for both targets is **0.6-1.1g/t Au, 205-317g/t Ag, 5.2-9.9% Zn, 4.0-5.9% Pb and 0-1.5% Cu**.

Tonnage ranges have been determined from the following:

- Rattler lower - 250m strike x 7.8m width x 300m depth x SG of 4 for massive sulphides = 2.3Mt
- Rattler upper - 400m strike x 20m width x 300m depth x SG of 4 for massive sulphides = 9.6Mt
- Cobra lower - 2 shears zones each 400m strike x 4m width x 200m depth x SG of 4 for massive sulphides = 2.5Mt
- Cobra upper - 2 shears zones each 600m strike x 10m width x 200m depth x SG of 4 for massive sulphides = 9.6Mt

The underground sampling and mapping has largely supported these estimates, with the Cobra assay results being towards the higher end of the grade estimates, and the Rattler width at the lower to mid-point of the inputs used.

Upcoming Work

Drilling is imminent

Approvals have been granted for a five hole, 1,200m diamond drilling programme targeting both Rattler and Cobra with targets shown in the previous section. This is expected to commence mid-July and therefore imminent. The purpose of this work will be to assess the depth potential of the poly-metallic mineralisation and results will be used to plan further work here.

Little Butte (CAV earning 100%)

Introduction and Tenure

Carnavale has the right to earn up to 100% of Little Butte, located in western Arizona, through the total expenditure of US\$6.5m over 10 years

The Little Butte Project is located in La Paz County, western Arizona, some 260km SSE of Las Vegas. The project, covering some 9km², comprises 107 unpatented and 7 patented claims. Carnavale has an option agreement to earn 100% of the project with terms as below:

- Option term of 10 years
- Total expenditure of US\$6 million
- First year commitment of US\$150k, escalating annually
- Nominal annual option payments totalling US\$400k over 10 years,
- Payments to purchase 3rd party tenements (patented claims) of US\$180k over 6 months
- Vendor retains a NSR of 3% over project and surrounding area of interest
- Vendor contracted to supply on-ground support

Geology

The Little Butte Project is located in the Basin and Range Province, with the structural geology largely shaped by the extensional tectonics – faults are interpreted as including

The geology includes Proterozoic metamorphics and Tertiary volcanics and sediments

Work to date has identified thick, low grade supergene copper-gold mineralisation – no primary source has been intersected as yet

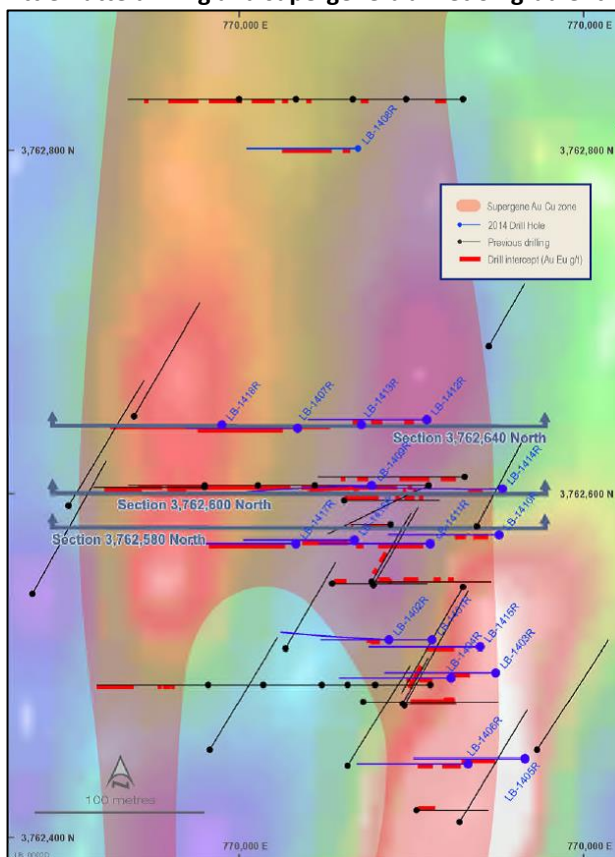
normal and low angle detachment faults. The area is underlain by Proterozoic basement of the Mojave Crustal Province, which includes granites, schists and gneisses overlain by Tertiary (ca 32-11Ma) sediments and volcanics associated with the extensional tectonic regime. The area is also located within the Cretaceous to Tertiary Laramide Arc, which, further to the east, hosts the world-class porphyry copper districts of Arizona, Utah, New Mexico and Mexico.

The Tertiary units, which are generally flat-lying, include clastic and chemical sediments, and felsic to mafic volcanics. As in large parts of Australia, the area is deeply weathered, with weathering up to 150m deep.

Mineralisation

The main mineralisation in the project is a supergene Cu-Au oxide blanket at the Railway Prospect, which has most recently been drilled by Carnavale. Drilling to date has not yet intersected a primary source for this supergene mineralisation; hence the primary mineralisation style is unknown, although given the Tertiary geology, could be structurally related (25-15Ma volcanics?), else related to mineralisation bleeding along structures from a deeper porphyry system. There are a number of small historical Cu-Au workings throughout the area.

Little Butte drilling and supergene blanket on gradient IP image



Source: Carnavale Resources

Previous Exploration

Exploration activities have been concentrated on the Railway Prospect, with former operators, Tuffnell Ltd ("Tuffnell") carrying out reverse circulation ("RC") drilling that defined broad, flat-lying overlapping zones of low grade gold and copper supergene mineralisation. Gradient array induced polarisation ("IP") surveying completed by Tuffnell defined two N-S trending structural zones. The results of the drilling carried out also suggested these were also co-incident with higher grade mineralisation, with this mineralisation associated with veining, shearing and hematite rich breccias.

Previous work has included RC drilling



Higher grade drilling results by Tuffnell included:

- LB-1010 – 44.2m @ 2.25g/t Au, 0.36% Cu from surface
- LB-1015 – 20.9m @ 1.32g/t Au, 0.31% Cu from 1.4m
- LB – 1101 – 30.5m @ 2.35g/t Au, 0.07% Cu from 39.6m

Current Activities

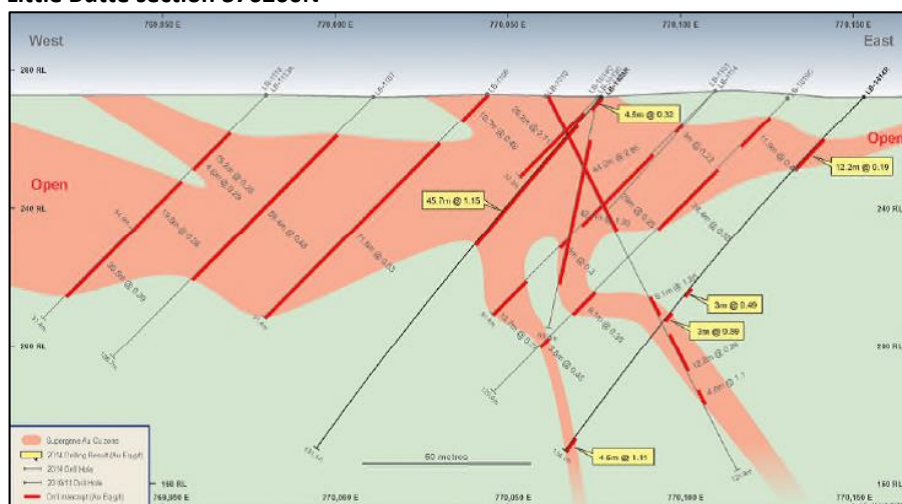
Carnavale completed an 18 hole, 1,734m RC drilling programme over Railway in late 2014. This work confirmed the presence of broad overlapping supergene gold and copper mineralised zones, with a strike length of 80m, up to 300m in width and with a thickness of up to 50m. This remains open along strike for a distance of up to 400m; however the work also showed that higher grade gold zones are less continuous than originally interpreted.

Carnavale has completed an 18 hole, 1,734m RC programme, which confirmed the presence of the supergene blanket

Selected results from this drilling include:

- LB-1402R – 7.6m @ 2.57g/t Au, 0.14% Cu from 10.7m
- LB-1409R – 45.7m @ 0.73g/t Au, 0.24% Cu from 10.7m
- LB-1413R – 62.5m @ 0.43g/t Au, 0.12% Cu from 25.9m

Little Butte section 376260N



Source: Carnavale Resources

The Company has recently completed a dipole-dipole IP survey over the Railway prospect to elucidate any potential sulphide sources for the supergene mineralisation. Analysis of the previous IP survey indicates that it was only testing shallow depths, and did not reach to fresh bedrock.

A dipole-dipole IP survey has recently been completed with the aim of identifying any potential sulphide sources for the known mineralisation

Upcoming Work

The Company is currently evaluating the results of exploration work completed to date, with this evaluation to be used in planning future activities.

Mining in Nevada

Although the Company has projects in both Nevada and Arizona, given the current focus on Red Hills the discussion below will concentrate on Nevada. That is not to ignore Arizona – the state has a long history of mining going back to gold and silver mining possibly starting with Spaniards in the 16th and 17th century, however it is copper for which Arizona is now rightfully known, producing around 65% of the USA’s annual production of some 1.25Mt of copper. This production is largely from large porphyry copper/molybdenum mines, most noticeably Morenci, which produces some 40% of Arizona’s output.

For all intents and purposes the permitting and licencing regime in Arizona is similar to that in Nevada given that mining is largely governed under Federal law.



History

As mentioned previously, Nevada is the US's largest gold producer, producing approximately 75% of all gold produced in the US in 2013. It is also the country's number one ranked mining jurisdiction, producing significant amounts of silver and copper in addition to the gold. Mineralisation styles include Carlin gold, epithermal gold/silver (e.g. Comstock), porphyry Cu-Mo-Au and poly-metallic vein and replacement (including skarn) deposits.

Nevada is the US's largest gold producer

The state has a long mining history, with the first "modern" mining in 1849 by '49ers on their way to the Californian gold fields. This early mining was however largely from small scale placer operations. The mid 1800's also saw the discovery of the Comstock Lode, the first major silver discovery in the US, but also a significant producer of gold.

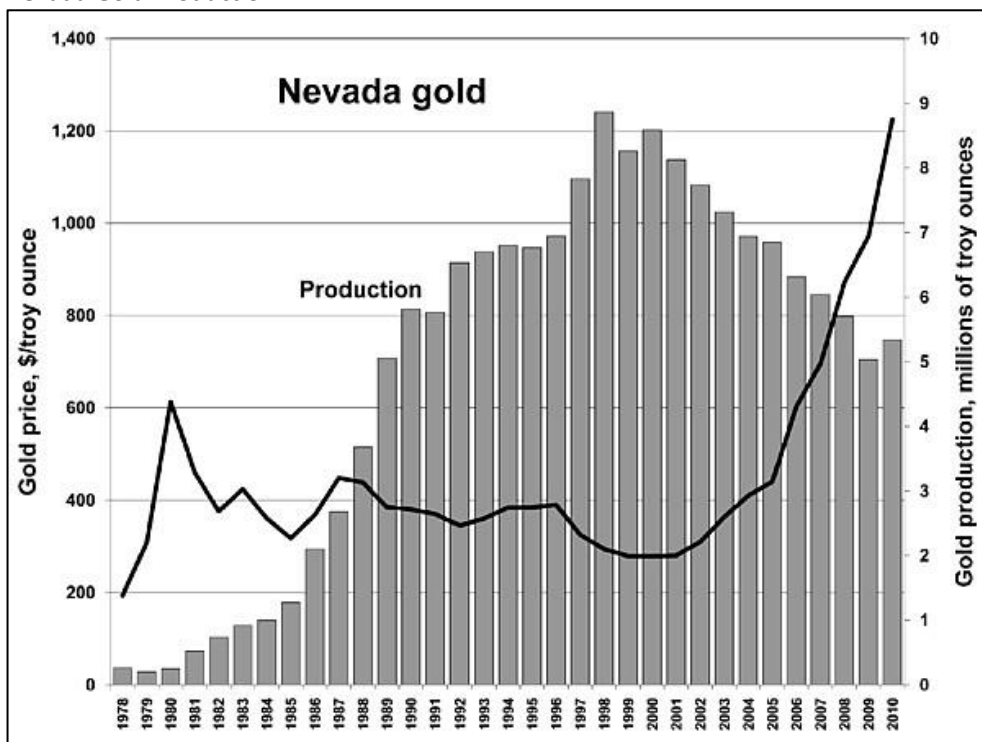
This was predated by American Indian mining for materials such as turquoise. There have also been myths (possibly true) of Spanish mining activities in what is now Nevada.

Initial gold discoveries in the Carlin area were first made in the 1870's, however early deposits were generally small placer operations. The initial "Carlin" style mineralisation was found at Carlin by Newmont in 1961, and commenced operations in 1965, pioneering the method of large scale open pits treating low grade ore using heap leach cyanide processing.

The Nevada gold industry has grown significantly since the discovery of Carlin style mineralisation in the 1960's

It was not until the rise in gold price in the 1970's that interest in the relatively low-grade Carlin-style mineralisation took off, and the coincident increase in gold production. Production has been concentrated along the Carlin and Battle Mountain/Eureka Trends.

Nevada Gold Production



Source: Nevada-outback-gems.com – extracted 28/09/14

Total recorded gold production from Nevada is over 150Moz, with the bulk of this from 1986 onwards as seen in the above chart.

Royalties

Nevada has no government royalties for gold production.

Nevada has no Government mining royalties



The main Federal law governing mining is the Mining Law of 1972

Federal lands, but not mining claims, are managed by various federal agencies

There are a number of claim types

Claims can be held in perpetuity, as long as annual maintenance fees are paid

The Red Hills poly-metallic mineralisation makes a compelling drill target

The key will be the extents and continuity of mineralisation

We rate Carnavale as SPECULATIVE BUY, with the results of the drilling being the key price driver

Permitting

The main federal law governing minerals is the Mining Law of 1872, which declared all mineral deposits in lands belonging to the United States to be free and open to exploration and purchase – this excludes federal lands, such as National Parks, that are not subject to access for prospecting. Claims come under the jurisdiction of the Civil Courts – there is no mining court, and land management agencies, such as the BLM or USFS amongst others have no jurisdiction over the claims. What the land management agencies do have however control over activities that may be carried out over claims. Federal agencies have clear timeframes in which they must respond to permitting applications.

In Nevada, mining tenements include both “Lode Claims” and “Placer Claims”, with “Mill Sites” and “Tunnel Claims” being for support operations. As in Australia, claims do not give the holder surface rights. Lode claims are generally 20 acres in size.

Claims can be transferred, and run in perpetuity as long as the annual maintenance fee (currently \$155) is paid by August 31 each year – failure to pay will automatically lead to lapse of the claim. Once lapsed they cannot be revived, except by act of Congress. Carnavale has no statutory expenditure (other than the annual maintenance fee) or work requirements over their claims – however there are the expenditure commitments under the earn-in agreement. Also, as mentioned previously, there is no requirement to lodge the results of exploration programmes with any government agencies.

The system of “patented claims”, where patents were issued so that the claimholder owned both the mineral and surface rights has been under moratorium since October 1, 1994. However there is the system of “fee land”, in effect freehold land with the landholder owning the mineral rights.

Breakaway’s View

The poly-metallic mineralisation at Red Hills makes a compelling drill target, and mining and work to date indicates the potential for a high grade, extensive zone of structurally controlled mineralisation. Although based on surface and adit sampling of oxide material only, our calculated equivalent zinc grade for the Company’s midpoint exploration target is in the order of 22% (based on current metal prices and with no allowance for recoveries, and equivalent in value to around 12g/t Au) confirms the potential of the prospect.

A key here is going to be the continuity and extents of the mineralisation, with the upcoming drilling being planned to test this potential. Shear hosted poly-metallic mineralisation can form laterally and/or vertically extensive bodies – examples in Australia (although not strictly comparable to Red Hills) include the CSA mine near Cobar – this has been mined over a vertical extent of around 1,600m.

Extents of mineralisation may partly depend upon other controls in addition to the host structure, including the wall rock chemistry and the presence of any off-setting structures at depth. There is also the chance of laterally restricted higher grade shoots within a broader low grade structure.

Given the geological similarities to Kinsley and Long Canyon to the north and the surface geochemistry at the Viper anomaly there is also the prospectivity for Carlin-style mineralisation to consider, which the Company plans to follow up at a later date, following further appraisal of the current information.

Little Butte also remains an attractive, albeit enigmatic target.

Given the above, experienced board and management and the skin they have in the game, we rate Carnavale as a SPECULATIVE BUY, with excellent leverage to any exploration success. Price movers will be positive results from the imminent drilling.



Directors and Management

Non-Executive Chairman
Ron Gajewski

Mr Gajewski is an accountant by profession, with many years of experience as a director of public listed companies and as a corporate advisor to public companies. Mr Gajewski was formerly an executive chairman of Contact Resources Ltd and has held directorships with mining companies listed in both Canada and Australia. (AICD) and an Associate of the Australasian Institute of Mining & Metallurgy (AusIMM).

Managing Director
Andrew Beckwith

Mr Beckwith is a successful explorer whose past experience includes senior roles with Anglo Gold Ashanti, Acacia Resources, Normandy NFM, North Flinders, BP Minerals and more recently at Westgold Resources.

Non-Executive Director
Rhett Brans

Mr Brans is a mining engineer with over 40 years of experience in project development of treatment plants and mine developments.

Mr Brans is a Non-Executive Director of Syrah Resources Limited and was previously a Director of Perseus Mining Limited and Tiger Resources Limited.

Non-Executive Director
Andrew Chapman

Mr Chapman is a chartered accountant with over 20 years' experience with publicly listed companies in the mineral resources, oil and gas and technology sectors.

Mr Chapman is an associate member of the Institute of Chartered Accountants (ICAA) and a Fellow of the Financial Services Institute of Australasia (Finsia). He is currently a director of Matsa Resources Limited and company secretary for Bulletin Resources Limited and previously Westgold Resources Ltd, and is a founding shareholder and director of Tojo Minerals Pty Ltd.

Biographies extracted from CAV website, June 9 2014



Analyst Verification

We, Grant Craighead and Mark Gordon, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

Disclosure

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Carnavale Resources and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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Breakaway Investment Group

AFSL 290093 ABN 84127962387

T+61293928010

F+61292792727

PO Box H116 Australia Square

Sydney, NSW 2001

Suite 505, 35 Lime Street,

Sydney, NSW 2000