

October 2014

**Grant Craighead** | Research Manager  
gcraighead@breakawayinvestmentgroup.com

**Mark Gordon** | Senior Research Analyst  
mgordon@breakawayresearch.com

### Company Information

ASX Code	AWV
Share Price	A\$0.043
Ord Shares	220.18m
Options	8.50m
<b>Market Cap (FD)</b>	<b>A\$9.83m</b>
Cash (June 2014)	A\$1.48m
Total Debt	A\$0m
<b>Enterprise Value</b>	<b>A\$8.35m</b>

### Directors and Management

Non-Exec Chairman	Malcolm James
Executive Director	Bill Fry
Non-Exec Director	Alasdair Cooke
Vice President - USA	John Hasleby
Study Manager	Lauritz Barnes
Company Secretary	Steven Jackson

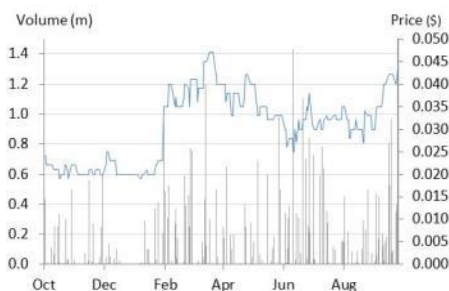
### Company Details

Address	Suite 1, 245 Churchill Ave Subiaco, WA 6008
Phone	+618 6465 5500
Web	www.anovametals.com.au

### Top Shareholders

Phoenix Gold	9%
Alasdair Cooke	8%
MRG Employees Trust	5%
Claridon Capital	5%
Lomacott	3%
Top 20	55%

### 1 Year Price Chart



Source: IRESS

# Anova Metals (AWV)

## The Big Spring to Production

*Recommendation: Speculative **BUY***

### Key Points

- **Quality gold resource in the world-class Carlin mining district**
- **Located over the historic Big Springs Mine**
- **Low capex and rapid path to production**
- **Initial 3 year, 122,000oz gold production at ~US\$908/ounce**
- **Toll treating at nearby roaster – risk mitigating**
- **Excellent exploration potential**
- **Committed and motivated Board and Management**

*In Big Springs, Anova has a high quality gold asset with a clear and rapid path to production. A key element is the low start-up capital of around US\$2 million for the initial open cut phase, with ore being processed via a toll treatment agreement with the neighbouring Jerritt Canyon Mine. This obviates the need to build a treatment plant, which in addition to cutting costs, simplifies permitting and significantly reduces the time and risks to start-up. The low capital for the following underground stages will be able to be funded from cash flow.*

*The proposed initial 3 year, 41,000ozpa operation has the potential to spin off significant cash, with which the Company plans to pay dividends. There is also excellent exploration and resource expansion potential – both in extensions to the current mineralisation, and also in the high quality exploration ground surrounding the Big Springs mining area.*

*Big Springs, being located in the Carlin district, is in a world class gold producing area, with access to all support required for a new operation. Another key positive of the jurisdiction are costs – the US is, compared to Australia, a low cost operating environment.*

### Company Overview

Anova Metals Limited (ASX: AWV) is an Australian based junior developer concentrating activities on the Big Springs Gold Project in northern Nevada. Since acquiring the historical producer in 2012, the Company has progressed steadily towards production.

With permitting for the initial stages expected in Q1, 2015, open cut mining will commence by the middle of 2015, using local mining contractors. An initial 3 year, 4 stage mining plan is being developed, which will include one open pit (with pre-stripping completed by an earlier operator) and three underground operations mining a total of 780,620t @ 5.52g/t gold.

Anova plans to increase mine life through expansion of existing resources and discoveries of new ones.



## Investment Thesis

### Simple, Low Capex Start-Up

#### *Simple start-up*

In the Big Springs Gold Project (“Big Springs” or “the Project”), Anova Metals (ASX: AWW, “Anova” or “the Company”), is looking at a simple and rapid start-up of its +1Moz resource, commencing with an open pit followed by a three phase underground operation, with treatment through tolling at the neighbouring Jerritt Canyon Mine.

Plans are to produce approximately 122,000oz of gold over an initial three year period, with significant potential for expansions thereafter.

#### *Only ~\$2m start-up capital required*

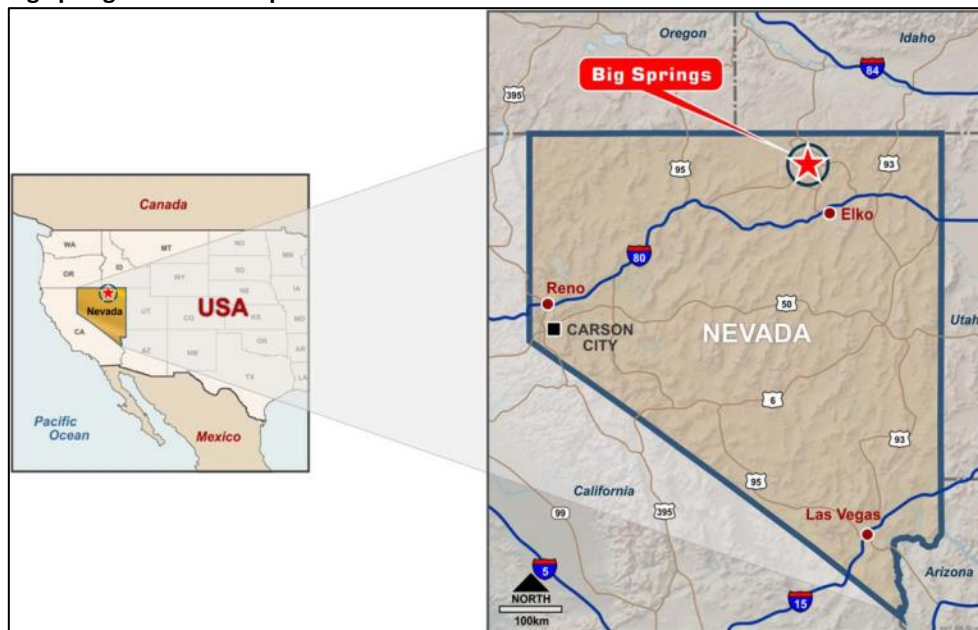
A key to the proposed Big Springs operation is the low initial capital requirements – no mill is required due to the toll treating agreement with Veris Gold Corp, with only ~US\$2 million start-up capex required for open pit establishment. The Company plans to use contractors for both open cut and underground mining, thus negating the need for purchasing mining equipment.

### World Class Mining District

#### *Gold project in a world class gold producer*

Big Springs is in the Carlin region of northern Nevada, a world class mining district that produces approximately 75% of the US’s annual gold output. The state has produced over 150Moz of gold, largely over the last 30 years, and is a mining friendly jurisdiction.

#### Big Springs Location Map



Source: Anova Metals

#### *Nevada has produced over 150Moz of gold*

### Excellent Infrastructure

#### *The region is served by excellent infrastructure, and support for mining operations*

The region is served by excellent infrastructure, and given the well-developed mining industry, there is ready access to the facilities and skills required to service a new operation.

### Low Operating Costs Jurisdiction

#### *The US is a low operating cost jurisdiction*

Another advantage of the US is relatively low mining operating costs when compared to Australia – this is largely as a result of cheaper labour, fuel and electricity. For example Australian labour costs in the mining sector are up to 50% higher than those in the US.



## Robust Resource

*A robust resource with a high grade component*

The Project includes a well-defined resource of 16Mt @ 2.0g/t for 1.03Moz, with a higher grade component of 3.1Mt @ 4.2g/t for 415koz. The initial mining inventory includes 781kt @ 5.52g/t Au, for 138,600oz of contained gold, with the 272koz balance of the high grade component to be further evaluated.

## Well Understood Mineralisation

*Well understood geology and metallurgy*

The mineralisation, including metallurgy, is well understood, and hence will help mitigate start-up risk. Ore from Big Springs was previously processed through a 1,000 tpd trial roaster located at Big Springs, which was the pre-cursor to the much larger 6,000 tpd Jerritt Canyon facility. Recoveries averaged 86% through the trial roaster. Jerritt Canyon has been treating similar ores for over 30 years, with good metallurgical recoveries of 85-90% expected. Geologically the mineralisation is well understood and defined.

## Excellent Exploration Potential

*Excellent potential to expand the resources*

There is considerable potential to expand current resources, through extensions to the known mineralisation, and through new discoveries on the surrounding tenements. A number of the ore shoots that the Company is looking at mining are still open down plunge.

## Strong and Committed Board and Management

*Strong and committed Board and Management*

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.

## Potential For Dividends

*Potential for dividends*

Anova are looking at paying dividends from early in the production phase, thus potentially providing a decent return to shareholders.

## Peer Comparison

We have concentrated largely on TSX-listed North American developers in our comparison, but have also included a few ASX listed developers for comparative values on the ASX. All companies listed have relatively advanced projects, with the majority in the DFS stage or later.

We have listed the companies in decreasing order of EV/company share of contained ounces of gold, and also included the same metric using Measured and Indicated contained gold. This measure can be used as a proxy for relative value, but needs to be used with care – this figure can be influenced by any number of factors. In addition we have converted figures to Australian dollars using current exchange rates. As can be seen from the table, Anova is near the lower end of the table when using this metric

Chesser has now signed a sale agreement on its 100% owned epithermal Kestanelik deposit in western Turkey, which includes 12.5Mt @ 1.86g/t gold for 746,000oz of contained open pit gold. Chesser is currently undertaking a PFS on this deposit. The sale price of US\$40 million equates to a price of US\$53/ounce

Chalice Gold has acquired the Cameron Project in Ontario from Coventry Resources via an all scrip transaction. The reason behind the negative EV is Chalice's cash position of A\$44m as of June 30, 2014, as opposed to a diluted market capitalisation of A\$37m. In the current market we have seen a number of examples of companies with large cash reserves being valued at or below cash, with no value ascribed to projects, even if the projects have merit.



## Anova Metals Peer Comparison

Company	Code	Location	Last Price AUD	EV Diluted (A\$m)	Global Resource (Mt)	Au Grade (g/t)	Company Equity Share	Contained Au Moz Coy Share	EV/oz Au equity share	EV/M & I oz Au equity share	Project Stage
Romarco Minerals	R: TSX	USA	\$0.707	\$462.6	91	1.65	100%	4.84	\$95.57	\$114.55	Permitting
Papillon Resources*	PIR: ASX	Mali	\$1.490	\$481.5	68	2.35	100%	5.15	\$93.43	\$103.81	PFS Completed
Premier Gold	PG: TSX	Canada, USA	\$2.677	\$395.9	122	2.31	97%	8.82	\$44.88	\$72.20	Feasibility
Midway Gold	MDW: TSX	USA	\$1.232	\$218.5	482	0.63	58%	5.74	\$38.03	\$47.09	Construction
Probe Minerals	PRB: TSX	Canada	\$2.192	\$169.4	84	1.65	100%	4.46	\$38.00	\$43.07	Resource Definition
Chesser Resources*	CHZ: ASX	Turkey	\$0.150	\$32.8	27	1.22	86%	0.90	\$36.27	\$116.02	PFS - Asset for sale
Golden Queen	GQM: TSX	USA	\$1.323	\$32.3	159	0.50	50%	1.29	\$25.07	\$26.83	Construction
Gascoyne Resources*	GCY: ASX	Australia	\$0.160	\$24.6	35	1.57	92%	1.61	\$15.24	\$37.19	PFS Completed
Atlantic Gold	AGB: ASX	Canada	\$0.300	\$13.3	23	1.62	81%	0.98	\$13.51	\$21.90	Feasibility
Anova Metals	AWV: ASX	USA	\$0.043	\$8.4	16	1.98	100%	1.02	\$8.16	\$18.14	Permitting
Sabina Gold & Silver	SBB: TSX	Canada	\$0.546	\$53.3	37	6.12	100%	7.19	\$7.42	\$10.13	PFS
Unity Mining	UML: ASX	Australia	\$0.009	\$3.6	3	5.52	100%	0.61	\$5.85	\$7.06	Producer - Henty Permitted - Dargues
Victoria Gold	VIT: TSX	Canada	\$0.111	\$8.7	300	0.65	100%	6.31	\$1.37	\$1.79	Permitting
Chalice Gold	CHN: ASX	Canada	\$0.120	-\$9.1	17	2.30	100%	1.27	-\$7.23	-\$13.56	PEA completed

Source: IRESS, Company reports

\* Papillon merged with B2Gold, with the shares suspended from trading on September 23, 2014 – The EV represents that as of the time of suspension

\* Chesser are in the process of selling the 746,000oz Kestanelik deposit for US\$40 million, or US\$53/oz

\* Gascoyne has entered into a HoA with Monument Mining (TSX.V: MMY) to form a 50:50 exploration and development JV – this is yet to be finalised

## Risks

As in any resources stock there are a number of risks involved as listed below – we consider operating costs and the gold price to be the key risks here.

Key risks include operating costs and gold prices

- **Operating Costs** – Controlling operating costs is a key consideration for the Big Springs Project, given the margins at current gold prices, at least on the proposed underground operations. The project is strongly geared to both positive and adverse changes in operating costs. One positive is that operating costs are significantly lower in the US than they would be on a similar operation in Australia.
- **Price Risk** – This is a key risk for any resources project, and one which companies have little or no control over. This is particularly topical for Anova, with the recent slide in the gold price, which has fallen around 30% from ~US\$1700/oz at the time of acquisition of the project to ~US\$1210/oz now. The project is highly geared to both positive and adverse movements in the gold price.
- **Permitting** – Permitting is a risk for any resources project, however in the case of Anova, operating in a historic mining area, and with the permitting process well in hand, we consider this as only a slight risk. This risk is also mitigated by not having to build a mill or tailings dam.
- **Development** – There are a number of risks involved in taking a project through development into operation. Given the simple nature of Anova's proposed operations, low capex and use of toll treating we consider this risk somewhat mitigated.
- **Exploration** – There is exploration risk in relation to the potential to increase resources. We consider this relatively low with regards to expanding the current mineralisation (e.g. down dip extensions at North Sammy), but somewhat higher on the exploration ground away from the mining area.

Permitting and development are largely derisked



## Project and Activities Review

### Introduction – Big Springs

*Big Spring is located over the Independence Trend, one of a number of gold mineralised trends in the Carlin District of Nevada*

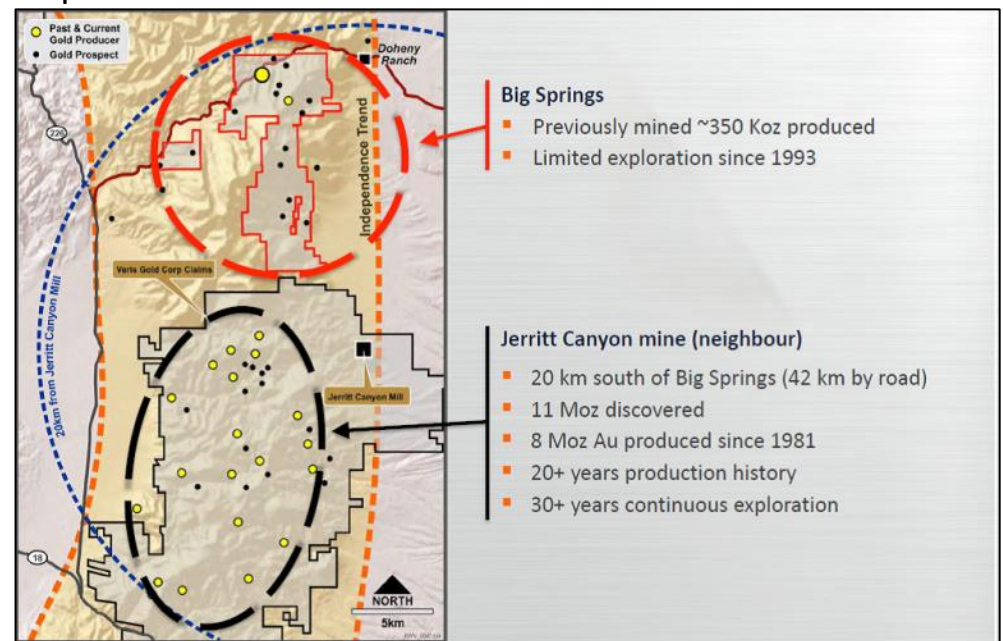
Anova's Big Springs Project comprises around 700 contiguous lode claims totalling ~70km<sup>2</sup>, located over the north-south trending Independence Trend within the Basin and Range Province of northern Nevada. The claims include a number of standard "lode" claims, Fee Land (where Anova hold both surface and mineral rights), and a number of claims with a US\$100,000pa royalty payable to a third party, with this prepaid amount to be offset against a future production royalty.

The Independence Trend is part of the Carlin region, which is the largest gold production centre in the US, and ranked third worldwide. Nevada produced approximately 5.5Moz of gold in 2013, some 75% of the total US production of 7.4Moz.

The region hosts a number of different styles of precious metals mineralisation, including epithermal, orogenic, and Carlin style, which is the largest producer.

### Independence Trend

*The Project is located immediately to the north of Veris Gold Corp's Jerritt Canyon Mine*



Source: Anova Metals

### Historic Operations

*Big Springs produced ~386Koz of gold from 1987 until 1993*

Big Springs produced around 386koz (from 510koz mined) in six open pits from 1987 until production ceased in 1993 due to low gold prices, and is located 20km north of Veris Gold Corp's operating Jerritt Canyon Mine. Jerritt Canyon has produced some 8Moz of gold since 1981, with 11Moz being discovered. Jerritt Canyon's resources, as of 31/12/2012, included 12.4Mt @ 5.6g/t Au (2.25Moz Au) in the Measured and Indicated categories, and 3.85Mt @ 5.3g/t Au (653koz Au) in the Inferred category.

Big Springs was operated by Independence Mining, a JV between Bull Run Gold Mines Ltd and Freeport Minerals Co (the then operator of Jerritt Canyon) from 1987 until 1993. The claims were allowed to lapse, and were later staked by GSI, and then acquired by Gateway Gold Corporation, a TSX-listed junior explorer. Work by Gateway included drilling from 2003 to 2008, which ceased when they were taken over by Victoria Gold Corporation (TSX.V: VIT) concentrating on extensions to the mineralisation discovered by Freeport.





*Anova acquired Big Springs in 2013, for a total cash consideration of ~\$4.65m and 20m shares.*

*In addition the transaction includes 45m performance shares*

*It is planned to commence production in mid-2015, initially from an open pit, and then from three underground operations, mining ~142koz of gold*

*Alimak and LHOS underground methods are being considered*

## Acquisition

The project was acquired by Anova (then Kimberley Rare Earths Limited) from Victoria Gold Corporation with completion in February 2013. Cash consideration was in the order of A\$4.65 million, plus 20 million consideration shares and 30 million performance shares (in three tranches) being issued or vested. There are currently another 15 million performance shares that are yet to vest – these will vest should a Probable Ore Reserve of at least 75,000oz be delineated by February 2015. The Company's view is that this will occur.

With the exception of the last tranche of performance shares, there are no remaining liabilities relating to the acquisition.

## Strategy and Planned Operations

Anova is currently working towards bringing Big Springs into production; originally through a 24,500oz open pit (previously pre-stripped by Independence), and then three underground operations, with plans to mine 138,600oz of gold. The Company is looking at commencing production in mid-2015, for a period of three years on current resources. The mineable resources comprise 780,620 @ 5.52g/t Au, with these including 10% mining dilution.

The four stage initial project is as follows:

1. South Sammy 601 Open Pit – 185,800t @ 4.1g/t – 24,500oz
2. South Sammy 601 and 701 Underground – 70,170t @ 5.72g/t – 12,900oz
3. North Sammy Underground – 357,500t @ 6.42g/t – 73,800oz
4. Beadles Creek Underground – 167,510t @ 5.10g/t – 27,400oz

During the initial mining stages, the Company will be evaluating the potential to extract further high grade remnant ore (272koz), as well as carrying out regional exploration on the highly prospective tenement package, so mine life can be potentially extended.

## Underground Mining

Preferred underground mining methods include long hole open stoping ("LHOS") or Alimak mining. A key advantage with these methods is that they require comparatively less development than other methods, thus helping the economics.

## Proposed Operations – Big Springs



Source: Anova Metals



### **Capital Costs**

*Low start-up capital of  
~US\$2m is expected*

The key to the Project is the low start-up capital cost – the Company has estimated that this will be in the order of US\$2 million for the initial open pit, which will mainly be for the regrading of internal roads, preparation of a ROM pad and the payment of rehabilitation bonds.

Initial access to the underground operations will be paid out of cash flow – this again is low cost, given the short development required to reach first ore – 23m in the case of the South Sammy 601 underground operation, and immediately into ore in the case of the South Sammy 701 mineralisation.

The use of contract miners is one key to the low start-up capital, the other is using toll treatment.

### **Toll Treatment and Metallurgy**

*A key to the project is toll  
treating through Veris'  
Jerritt Canyon mill*

The Company has reached a toll treatment agreement with Veris Gold Corp., with ore from Big Springs to be treated at the Jerritt Canyon mill some 42km by road from Big Springs. The plant, including a roaster, has recently undergone a US\$250m upgrade and refurbishment, and being only one of three roasters in the state, is considered a strategic asset, and currently toll treats in addition to processing Jerritt Canyon ore.

### **Jerritt Canyon Process Facility**



*Source: Anova Metals*

Under the terms of the deal, Anova can deliver up to 1,000 short tons (907 tonnes) of ore per day to Jerritt Canyon, with the ore being milled in 25,000 short ton (22,700 tonne) lots. Anova retains ownership of the ore and gold through the process. The toll treatment charge is US\$62/short ton (US\$68.40/tonne), which is only payable after Anova have received payment for their gold.

*Toll treating significantly  
simplifies the permitting  
process*

The use of toll treatment has two key advantages, firstly it significantly cuts down the capital cost, and secondly it greatly simplifies the mine permitting process.

*Toll treating takes  
advantage of Veris'  
experience in treating  
the refractory ore*

Another issue is the complex metallurgy – given the refractory nature of the gold, roasting is required, and hence Anova will be taking advantage of Veris' experience in treating this type of ore. In addition there is a significant arsenic content in the ore – all potential environmental liabilities stay with Veris.

*Metallurgical recoveries  
of 85-90% are expected*

Metallurgical recoveries of 85-90% are expected, based on current Jerritt Canyon recoveries. Historically recoveries from Big Springs were in the order of 86%. Further testwork is underway at Jerritt Canyon, with additional Bond Mill Index testwork also planned.



*The Company has obtained preliminary quotes for the operation*

### Operating Costs

Anova is in the process of costing the proposed operations, and has obtained quotes from local contractors for both open pit and underground operations.

We have indicative numbers for the proposed operation, with the results presented in the following table.

In our view the estimated costs appear to be reasonable, and overall generate reasonable returns over the life of mine, albeit with more marginal returns from the proposed 701 underground and Beadles Creek underground operations.

Average life of mine operating costs are broadly in line with similar operations. We note that results are moderately to highly sensitive to both changes in the gold price and operating cost given the current gold price environment.

*Our analysis indicates reasonable margins from the 601 open cut and North Sammy underground*

### Indicative Operating Cash Flow Analysis

Note: Figures in \$US and metric tonnes	601 Pit	601 UG	701 UG	North Sammy	Beadles Creek	Total/Average
Diluted Ore Tonnes	185,800	21,200	48,973	357,500	167,150	<b>780,620</b>
Waste Tonnes	1,656k					
Diluted Grade	4.10	6.56	5.35	6.42	5.10	<b>5.52</b>
Processing Recovery	88%	88%	88%	88%	88%	<b>88%</b>
Ounces Recovered	21,553	3,935	7,413	64,937	24,119	<b>121,956</b>
Cost per Tonne	<b>\$98.46</b>	<b>\$170.40</b>	<b>\$150.44</b>	<b>\$152.80</b>	<b>\$160.56</b>	<b>\$141.86</b>
Mining Cost - OC	\$20.90	\$0.00	\$0.00	\$0.00	\$0.00	<b>\$4.97</b>
Mining Cost UG	\$0.00	\$92.84	\$72.88	\$75.24	\$83.00	<b>\$59.32</b>
Ore Transport	\$6.30	\$6.30	\$6.30	\$6.30	\$6.30	<b>\$6.30</b>
Treatment	\$68.34	\$68.34	\$68.34	\$68.34	\$68.34	<b>\$68.34</b>
G and A	\$2.92	\$2.92	\$2.92	\$2.92	\$2.92	<b>\$2.92</b>
Cost per Ounce	<b>\$849</b>	<b>\$918</b>	<b>\$994</b>	<b>\$841</b>	<b>\$1,113</b>	<b>\$908</b>
Mining OC	\$180	\$0	\$0	\$0	\$0	<b>\$32</b>
Mining UG	\$0	\$500	\$481	\$414	\$575	<b>\$380</b>
Ore Transport	\$54	\$34	\$42	\$35	\$44	<b>\$40</b>
Treatment	\$589	\$368	\$451	\$376	\$474	<b>\$437</b>
G and A	\$25	\$16	\$19	\$16	\$20	<b>\$19</b>
Gold Price per Ounce	<b>\$1,215</b>	<b>\$1,215</b>	<b>\$1,215</b>	<b>\$1,215</b>	<b>\$1,215</b>	<b>\$1,215</b>
Margin per Ounce	<b>\$366</b>	<b>\$297</b>	<b>\$221</b>	<b>\$374</b>	<b>\$102</b>	<b>\$307</b>
OCF (US'000)	<b>\$7,893</b>	<b>\$1,168</b>	<b>\$1,639</b>	<b>\$24,271</b>	<b>\$2,467</b>	<b>\$37,438</b>
OCF (A\$'000, 0.90 ER)	<b>\$8,770</b>	<b>\$1,298</b>	<b>\$1,821</b>	<b>\$26,967</b>	<b>\$2,741</b>	<b>\$41,598</b>

Source: Anova Metals, Breakaway Analysis

### Permitting

The land is administered by the US Forestry Service ("USFS"), which has clear permitting timeframes that they are required to meet.

*Permitting for stages 1 and 2 is well advanced, with approvals expected in Q1, 2015*

Operations permitting for Stages 1 and 2 is well advanced, with approval expected in Q1, 2015. This was originally envisaged for late 2014; however there was a ten week delay due to the requirement to relocate the waste dump, and the resultant need to redraft the permit application, which needed to be reviewed by all referring agencies.





*The land is administered by the USFS, who have clear permitting guidelines*

It is envisaged that the Stage 3 and 4 permitting process, will be initiated upon commencement of Stage 1 and 2 operations. This is expected to take the form of an addendum to the Stage 1 and 2 permit.

### **Current Activities and Budget**

The Company is currently undertaking permitting, mine planning, hydrogeological and geotechnical studies relating to the proposed operations.

*Drilling is planned on a number of targets later in 2014*

Drilling is planned in a number of areas later in 2014, with the drilling permit currently in the approvals process. This will include infill drilling over the proposed 601 open pit, and hydrogeological drilling at North Sammy. Exploration drilling is also planned at Beadles in 2014.

*Expected expenditure through to first gold payments is A\$5.2m, including start-up capital*

Expected expenditure until first gold receipts include:

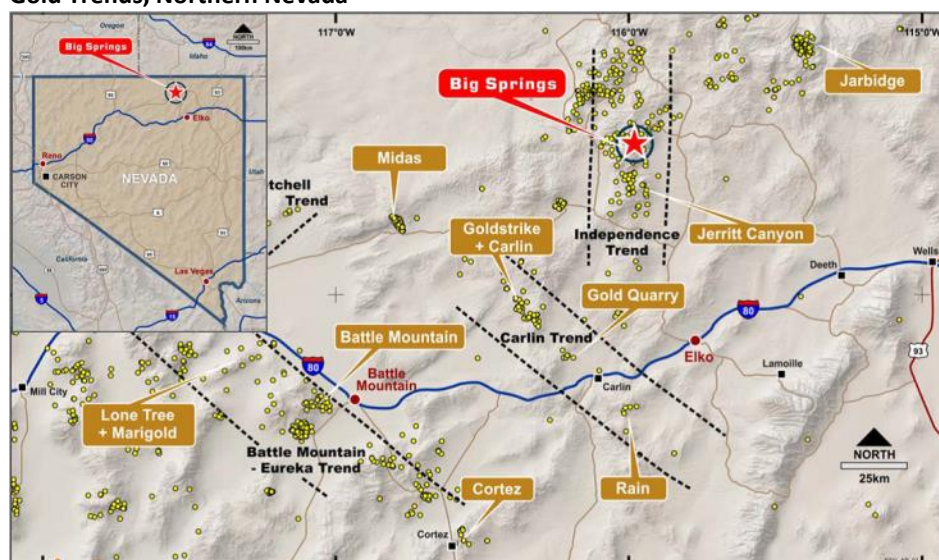
- A\$1.2 million – drilling programme
- A\$1.8 million – permitting and other working capital
- A\$2.2 million – Start-up capital

### **Geology and Mineralisation**

*The Project is located on the north trending Independence Trend*

The Project is located on the Independence Trend, one of a number of gold trends within the Carlin District, with these shown below. Big Springs is a Carlin style deposit.

#### **Gold Trends, Northern Nevada**



Source: Anova Metals

*The region is structurally complex, with geology dominated by a number of generally flat lying thrust sheets of Palaeozoic sediments*

Geology is characterised by gently dipping thrust sheets of largely Palaeozoic sediments, with numerous sub-horizontal thrust faults separating the allochthonous blocks. The area is structurally complex, with a number of other structures throughout the region. The sediments range from siliciclastic to carbonate dominated, with carbonates hosting the mineralisation due to their reactive nature. The mineralised units at Big Springs are Permian aged shelf-facies dolomitic siltstones, located between the lower Argillic and upper Schoonover thrusts, and termed the “Overlap Assemblage”.

*The region has been subjected to a number of igneous events, the last of which drove the mineralising process*

The geological history includes a number of igneous events, with the most recent being Late Eocene (~40Ma) in age, which is interpreted as driving the processes leading to the formation of the Carlin-style mineralisation. Eocene rocks include volcanics and intrusives.

Gold mineralisation is both structurally and lithologically controlled, and is fine-grained (commonly <1µm), associated with pyrite and arsenopyrite. Preferential host rocks are

Gold mineralisation is both structurally and lithological controlled, with reactive carbonate units being the preferred host

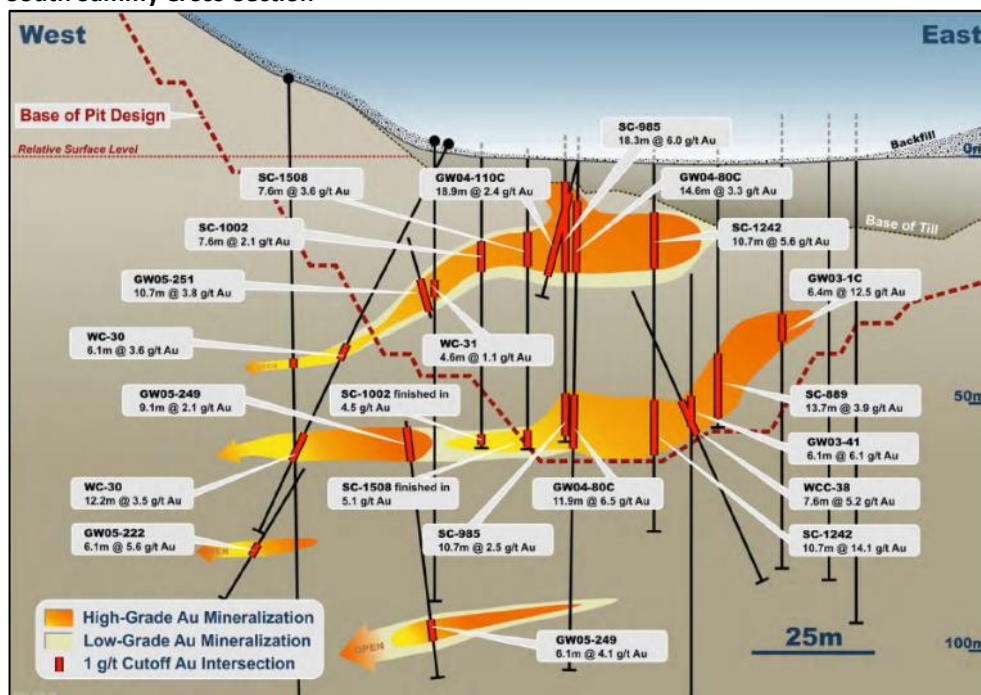
calcareous sedimentary rocks, which have been altered by the circulating meteoric fluids, with reactions leading to the deposition of gold. Key mineralisation sites include the intersection of structures and suitable host sediments, with major structures acting as fluid pathways.

In the Big Springs area key structures include the north-south trending, steeply dipping Brien's Fault, the shallowly NW dipping Argillic and Schoonover Shear Zones, and a number of other steeply dipping east-west to NW-SE trending faults.

At North Sammy, mineralisation generally occurs as a series of moderately NNW plunging shoots, controlled by the intersection of the footwall Argillic Thrust and E-W trending structures. Mineralisation at South Sammy is more complex, being controlled by a series of structures, including Brien's Fault.

Ore shoots at North Sammy are generally moderately NNW plunging

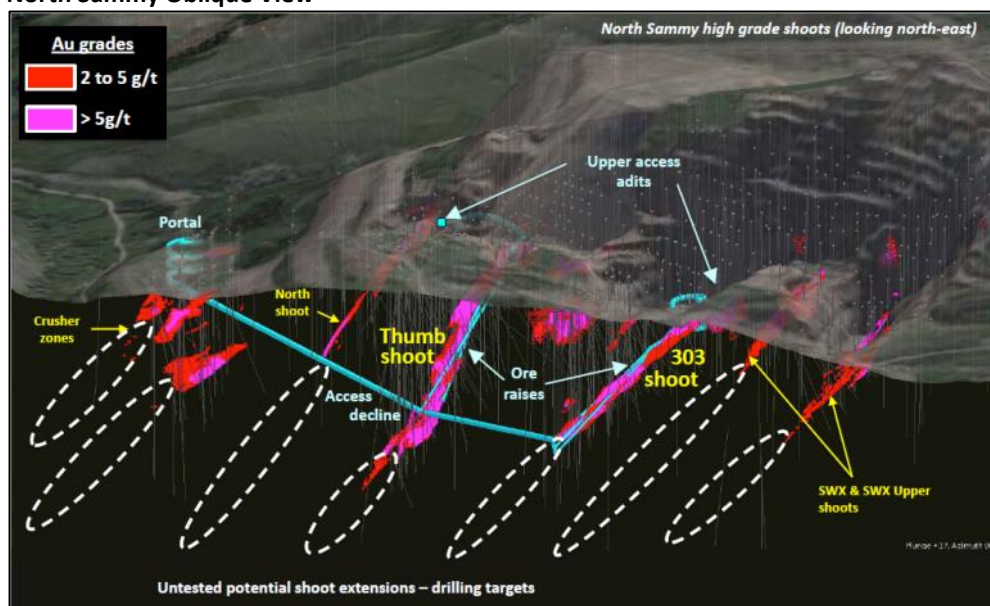
### South Sammy Cross-Section



Source: Anova Metals

### North Sammy Oblique View

North Sammy shoots are open at depth



Source: Anova Metals



## Resources

JORC-compliant resources total 16.032Mt @ 2g/t Au, for contained gold of 1.03Moz, with 44% of resources in the Measured and Indicated categories.

Resources have been calculated from drilling carried by Freeport and Gateway.

### Big Springs JORC 2012 Compliant Resources

Deposit	Resource Category	Cut-off g/t Au	Tonnes kt	Grade g/t Au	Contained gold ounces
North Sammy	Measured	1	346	7	77,900
	Indicated	1	615	3.1	62,200
	Inferred	1	498	2.8	44,100
	<b>Subtotal</b>	<b>1</b>	<b>1,458</b>	<b>3.9</b>	<b>184,100</b>
North Sammy Contact	Measured	0.8			
	Indicated	0.8	443	2.3	32,400
	Inferred	0.8	864	1.4	39,300
	<b>Subtotal</b>	<b>0.8</b>	<b>1,307</b>	<b>1.7</b>	<b>71,800</b>
South Sammy	Measured	0.8	295	4	38,200
	Indicated	0.8	3,586	2.1	239,900
	Inferred	0.8	3,721	1.3	159,000
	<b>Subtotal</b>	<b>0.8</b>	<b>7,602</b>	<b>1.8</b>	<b>437,200</b>
Beadles Creek	Measured	1			
	Indicated	1	119	2.2	8,200
	Inferred	1	2,583	2.3	193,500
	<b>Subtotal</b>	<b>1</b>	<b>2,702</b>	<b>2.3</b>	<b>201,700</b>
Mac Ridge	Measured	0.8			
	Indicated	0.8			
	Inferred	0.8	1,887	1.3	81,100
	<b>Subtotal</b>	<b>0.8</b>	<b>1,887</b>	<b>1.3</b>	<b>81,100</b>
Dorsey Creek	Measured	0.8			
	Indicated	0.8			
	Inferred	0.8	278	1.4	12,900
	<b>Subtotal</b>	<b>0.8</b>	<b>278</b>	<b>1.4</b>	<b>12,900</b>
Briens Fault	Measured	1			
	Indicated	1			
	Inferred	1	799	1.6	40,500
	<b>Subtotal</b>	<b>1</b>	<b>799</b>	<b>1.6</b>	<b>40,500</b>
Total	<b>Measured</b>		<b>641</b>	<b>5.7</b>	<b>116,100</b>
	<b>Indicated</b>		<b>4,762</b>	<b>2.2</b>	<b>343,300</b>
	<b>Inferred</b>		<b>10,630</b>	<b>1.7</b>	<b>570,400</b>
	<b>Total</b>		<b>16,032</b>	<b>2.0</b>	<b>1,029,900</b>

Resources total 16Mt @ 2g/t Au for 1.03Moz contained Au

Source: Anova Metals

## Exploration Potential

Our view is that Anova's tenements contain excellent exploration potential. This includes extensions to known mineralisation, as well as the chance for new discoveries – there has only been minimal exploration away from the known deposits since 1993.

Anova's claims contain excellent exploration potential



The potential is highlighted by the comparison between the Jerritt Canyon area and Big Springs:

- Jerritt Canyon – 11Moz identified, 8Moz produced since 1981
- Big Springs – 1Moz identified, 350Koz produced

*All shoots at North Sammy are open down plunge*

One of the key areas with potential for extending the known mineralisation is at North Sammy, with all shoots being open down plunge. Beadles Creek and South Sammy's also have potential for depth extension – the Company is planning to drill test a number of targets commencing in Q4, 2014.

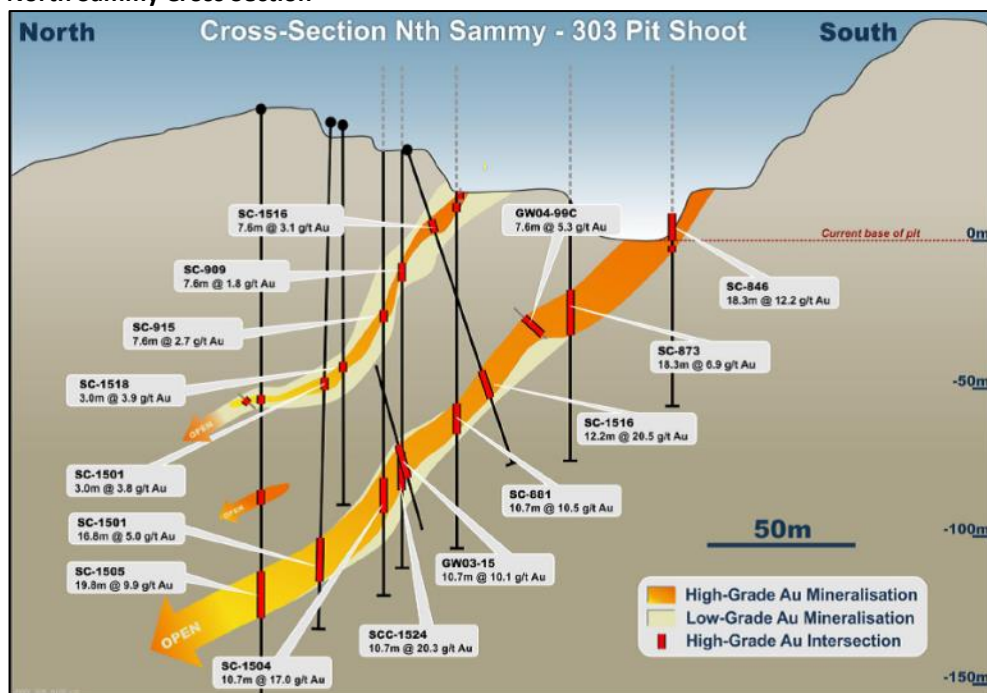
A review of historic exploration data has identified a number of prospective regional targets, with this shown up largely by surface geochemical anomalism. In addition some areas are masked by up to 30m of glacial till, precluding effective exploration.

Key targets include:

*A review of historic exploration data has identified a number of prospective exploration targets*

- A number of poorly tested geochemical anomalies in the vicinity of the known mineralisation
- Golden Dome – extensive gold-in-soil anomalies possibly representing leakage up NW trending faults from a deeper lithological host, interpreted as being Hanson Creek Formation at depth, with the Hanson Creek Formation being the host for the Jerritt Canyon mineralisation
- Mac Ridge East – a large area of Hanson Creek Formation to east of the Big Springs Mine, which has returned rock chips up to 2g/t, with only limited soil grids and drilling carried out.

#### North Sammy Cross Section



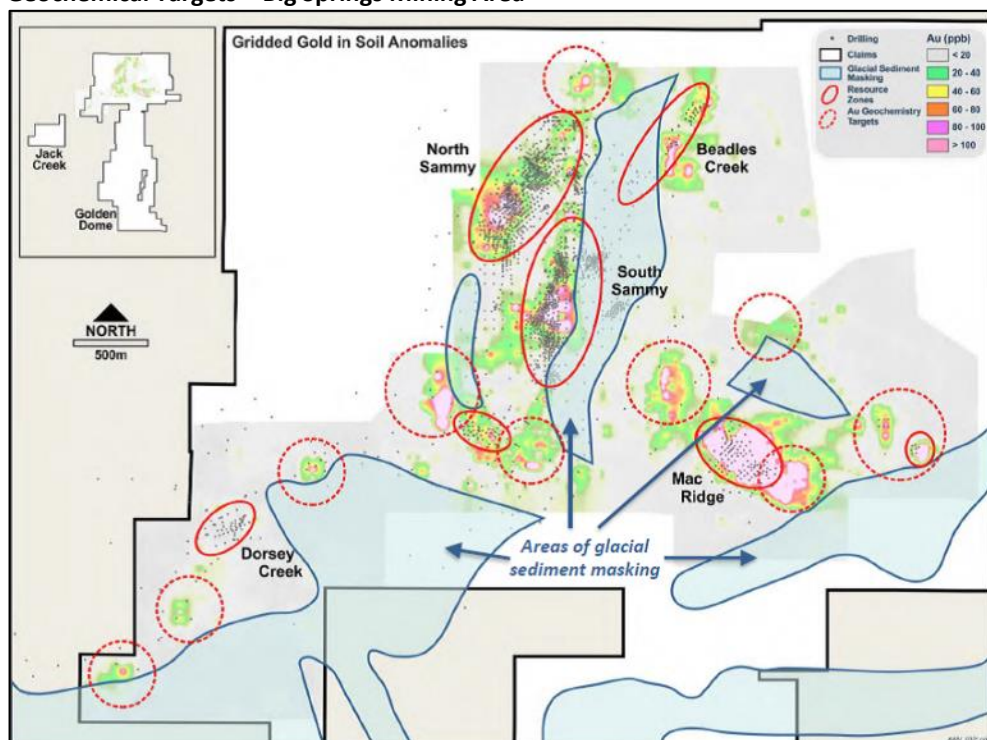
Source: Anova Metals





## Geochemical Targets – Big Springs Mining Area

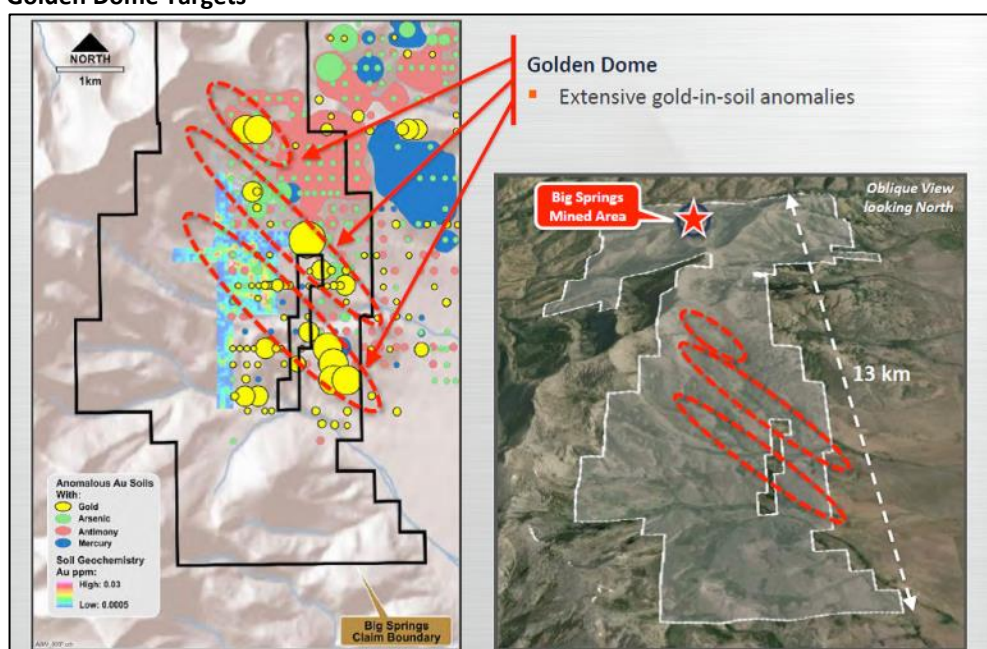
Significant areas of geochemical anomalism in the Big Springs mining area



Source: Anova Metals

## Golden Dome Targets

Golden Dome contains untested gold anomalies



Source: Anova Metals

## Mining in Nevada

### History

Nevada is the US's largest gold producer

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, porphyry Cu-Mo-Au and poly-metallic vein and replacement (including skarn) deposits.

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.

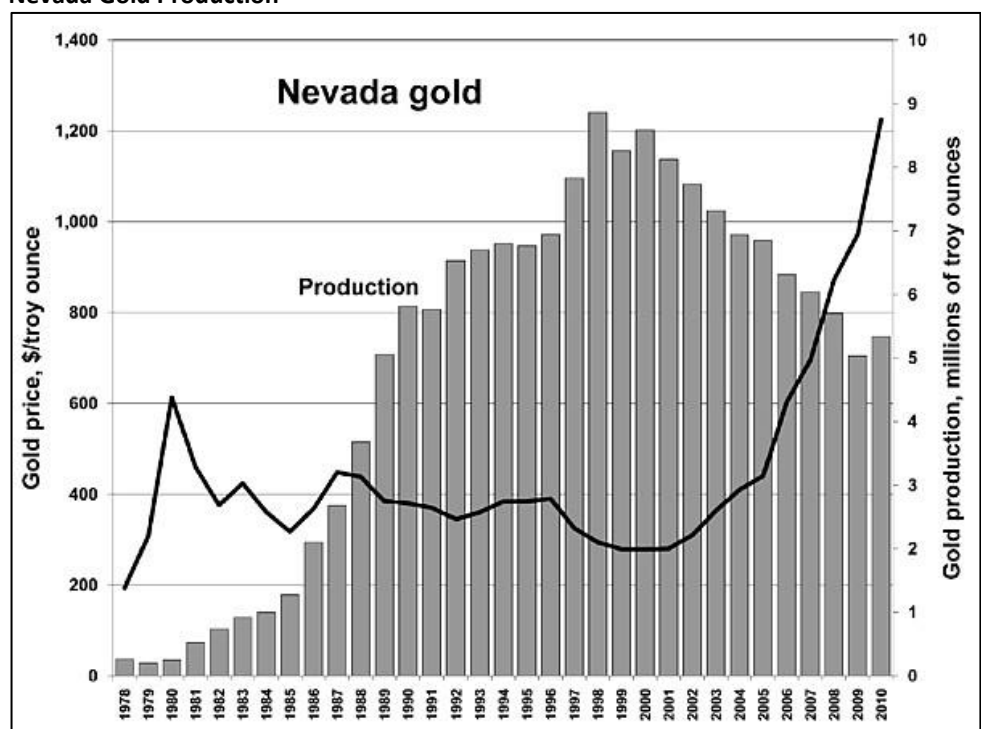
This was predated by American Indian mining for materials such as turquoise. There have also been myths (possibly true) of Spanish mining activities in what is now Nevada.

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.

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.

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

### 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.

*Nevada has no Government mining royalties*

### Royalties

Nevada has no government royalties for gold production.

### 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 is control over activities that may be carried out over claims. Hence Anova is dealing with the USFS in getting permits and

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

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



approvals. The USFS will also coordinate with other agencies that have an interest in the areas covered by the claims.

Federal agencies have clear timeframes in which they must respond to permitting applications – this gives more certainty on overall timeframes.

*There are a number of claim types*

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 held in perpetuity, as long as annual maintenance fees are paid*

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. Anova have no expenditure (other than the annual maintenance fee) or work requirements over their claims.

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. Anova currently hold 148ha of Fee Land in the Lower Mac Ridge and Golden Dome prospects.

## **Breakaway's View**

*In Big Springs Anova has a quality project in a proven mining jurisdiction*

In Big Springs, Anova has a high quality project in a proven and world-class mining area. The key for the project is the low capital start-up of US\$2 million, due to the toll treatment agreement with Veris, the use of contract miners, and the pre-strip on the South Sammy pit being completed by the original operators. In addition we expect operating costs to be relatively low when compared to similar operations in other parts of the world, with the US being a relatively low cost mining jurisdiction.

*Toll treating significantly de-risks the Project*

The use of toll treating de-risks the project in a number of ways – there is no need to build and commission a plant and associated infrastructure, and ore from Big Springs has been historically treated through a roaster located on-site that was the pre-cursor to the Jerritt Canyon roaster. The Company is confident that 85-90% can be achieved based on previous evidence and the current recoveries being achieved at Jerritt Canyon on similar ore types.

We also see the significant exploration prospectivity of the project, including additions to existing resources and new discoveries, with the potential to considerably expand resources and hence mine life.

*Our view is the gold price and operating costs are the key risks*

Our view is that the greatest risks are operating costs and gold price with the project having moderate to high leverage to both – a 20% adverse movement in either would wipe out the majority of the indicative operating surplus, although cash flows will still be positive. Conversely, the project is also geared to improvements in either parameter. Anova has been unfortunate in seeing the gold price slide from around US\$1700/ounce at the time of acquisition to around US\$1200/ounce now, turning a potentially very robust project into one that is more vulnerable to adverse movements in prices and costs.

*We rate Anova as a SPECULATIVE BUY*

Given the above and despite the risks, we rate Anova as a SPECULATIVE BUY, with the potential to provide significant returns for shareholders. Technically the project is largely de-risked it has a low start-up capital, is close to being permitted and is run by a team with extensive experience in the junior resources sector, including operations.



## Directors and Management

### Non-Executive Chairman

#### Malcolm James

**Mr James** is a business graduate of RMIT University (Melbourne) with over 30 years' experience in merchant banking, engineering, manufacturing, mining, energy, financing, philanthropic and social ventures. Over the past 25 years he has had active roles in identifying, exploring, financing and developing a number of significant natural resource and energy projects in Australia, the former Soviet Union, the Middle East, Africa, Asia, South America and the USA. Mr James has held executive and non-executive board positions on several Australian and London listed companies, business associations, sporting and not-for profit organisations. He has been directly involved in over A\$2 billion of equity and debt financing and was a founding director of Resource & Capital Management – a boutique resource and capital management firm that was responsible for the identification, financing and listing of several projects/companies on the Australian and London Securities Exchanges.

Mr James is currently an Executive Director – Finance and Operations, for Peninsula Energy Limited, an ASX listed company; Non-Executive Chairman of Alecto Minerals plc an AIM (UK) listed company. Mr James is also a Fellow of the Australian Institute of Company Directors (AICD) and an Associate of the Australasian Institute of Mining & Metallurgy (AusIMM).

### Executive Director

#### Bill Fry

**Mr Fry** has more than 20 years corporate experience in the mining and resources industry, specialising in accounting, management, business development and general corporate activities. He has vast experience in project evaluation and development, project funding, management, finance and operations. Over the past 15 years, Mr Fry has been a Director of several private and public companies with activities ranging from funds management, minerals exploration, mining and quarrying.

Mr Fry is currently a Director of Energy Ventures Limited, African Energy Resources Ltd, Anova Metals Limited and Mitchell River Group

### Non-executive Director

#### Alasdair Cooke

**Mr Cooke** is a qualified geologist and has been involved throughout his career in mineral exploration and corporate development, including eight years spent with BHP Minerals Business Development Group and over fifteen years managing public resource companies.

Mr Cooke is a founding partner of the Mitchell River Group, which over the past fifteen years has established a number of successful mining projects and resources companies, developing greenfield mines in Australia, Africa and South America. Mr Cooke is currently Chairman of Energy Ventures Ltd, African Energy Resources Ltd and a Director of Anova Metals Ltd.

### Vice President - USA

#### John Hasleby

**Mr Hasleby** is a geologist with over 29 years' experience in the exploration and mining industries. He has an operational and managerial background in exploration, development and mining with Australian and international companies, in the successful search for oil & gas, uranium, platinoids, base metals and rare earths in Australia and overseas. He has a Bachelor of Applied Science degree and is a member of the Australasian Institute of Mining and Metallurgy.

### Study Manager - Mining and Resource

#### Lauritz Barnes

**Mr Barnes** is a geologist with over 15 years' experience, specialising in resource estimation, project evaluation and project development. He is a member of both the Australasian Institute of Mining and Metallurgy (AusIMM) and the Australian Institute of Geoscientists (AIG). His initial roles were with for BHP Minerals (now BHP Billiton) at the Cannington Ag-Pb-Zn Mine in Queensland and with the exploration group based in Perth, Western Australia. He set up his own consulting company in 1999 and began working with Mitchell River Group as a Geologist. Specialising in resource estimation and project evaluation, he has consulted over the years to numerous ASX, TSX and AIM listed companies including Panoramic Resources (formerly Sally Malay Mining Limited), Albidon Limited, Mirabela Nickel, Wildhorse Energy and Valdera Resources. Recently, his primary consulting and advisory roles have been to ASX listed companies including African Energy Resources, Anova Metals, Exco Resources, Crusader Resources and Energy Ventures. Commodities covered in these various roles include gold, copper-gold, nickel, uranium, base metals, coal and rare earths.

### Company Secretary

#### Steven Jackson

Mr Jackson is a member of CPA Australia who graduated from the University of Western Australia in 2008 with a Bachelor of Economics having majored in International Business Economics and Money and Banking.

*Biographies extracted from AWV website, September 30, 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 Anova Metals and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

### **Disclaimer**

Any observations, conclusions, deductions, or estimates of figures that have been made by Breakaway Research and the Breakaway Investment Group in this report should not be relied upon for investment purposes and the reader should make his or her own investigations. This publication has been issued on the basis that it is only for the information and exclusive use of the particular person to whom it is provided. Any recommendations contained herein are based on a consideration of the securities alone. In preparing such general advice no account was taken of the investment objectives, financial situation and particular needs of a particular person. Before making an investment decision on the basis of this advice, investors and prospective investors need to consider, with or without the assistance of a securities adviser, whether the advice is appropriate in light of the particular investment needs, objectives and financial circumstances of the investor or the prospective investor. Although the information contained in this publication has been obtained from sources considered and believed to be both reliable and accurate, no responsibility is accepted for any opinion expressed or for any error or omission that may have occurred therein.

#### **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