

# HALLGARTEN & COMPANY

## Mine Visit Report

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## Almonty Industries (All.v) Strategy: Long

Key Metrics		2014	2015e	2016e
Price (CAD)	\$ 0.41		n/a	n/a
12-Month Target Price (CAD)	\$ 1.12			
Upside to Target	173%			
High-low (12 mth)	\$0.40 - \$0.86			
Market Cap (CAD mn)	\$ 35.3			
Shares Outstanding (millions)	86.20			
Fully diluted shares O/S	90.70			
		Consensus EPS	n/a	n/a
		Hallgarten EPS	(\$0.03)	\$0.02
		Actual EPS	\$0.24	
		P/E	1.7	n/a
				25.42
		Dividend	\$ 0.0272	\$ -
		Yield	6.6%	0.0%

# Almonty Industries

## Spanish Mine Visit

- + Almonty is a producer of Tungsten in Spain and Australia, with four years of operating history behind it in Spain
- + The company is consolidating Tungsten operations around the globe and as such is one of the few operating mines accessible through Western capital markets
- + A nearly-complete low-budget plant expansion at Los Santos should enhance recoveries and concentrate grades
- + The number of prospective projects (well, largely reopening of old mines) in the Western World is not that great as to spoil a price recovery scenario
- + Of the upcoming projects, Almonty has two of the most advanced in Sangdong and Valtreixal
- × Prices remain at levels that are breakeven for Almonty
- × The Chinese as both the largest producer and one of the main users have a vested interest in higher prices but that does not mean that they may not push prices down to achieve other policy or strategic goals

### Background

The principal business of Almonty Industries Inc. (TSX-V: AII) is the mining, processing and shipping of tungsten concentrate from its two tungsten mines. One is at the Los Santos Project, located approximately 50 kilometres from Salamanca in western Spain. The Los Santos Project was acquired by Almonty in September 2011. The mine was originally opened in 2008 and commissioned in July 2010 by its former owner. The second mine is called Wolfram Camp and is in the Australian state of Queensland. It is also producing and was acquired last year. The company also owns the Valtreixal project in Galicia in northwest Spain and the Sangdong project in South Korea. In this note we shall focus on the Los Santos mine.

### The Mine Trip

In the first week of November, we went to visit the Los Santos mine in Spain with a view to seeing current operations and discussing the other activities of the company in Spain, Australia and South Korea. The CEO of the company, Lewis Black was on site at the time, as were staff who had worked at or visited the company's other operations around the globe. Interestingly the staff are composed of a strong component of Portuguese mine staff, many of whom are known to the company management since the days when the Almonty team ran Primary Mining, which owned the Panasquiera Tungsten mine in Portugal.

The Los Santos scheelite deposit is in the province of Salamanca in western Spain. It is 180 km west of Madrid, 50 km south of the city of Salamanca. The drive to the mine from Salamanca is an easy one over a double carriageway most of the way through flat to lightly rolling landscape. The area around the actual mine is low hills with a mix of small holdings. The cultivation of pigs is the major industry in the region as the “capital of Jamon Iberico” is a small town nearby where the pigs fed on acorns produce this famous and costly product.



Los Santos (pictured below) is a large village of around 2,000 people.

The mine has become quite an important feature of the local economy over the nine years it has been operating. With around 65 contract staff and tens of direct employees, the mine has a significant trickledown effect in such a small community. It is also worth remembering that unemployment in Spain is 25% at this time and has been even higher since 2008 and that in isolated rural areas it can be significantly higher. The company has strong relations with local mayors and councils. It has even established its company “canteen” in the town, rather than out at the minesite. This has effectively doubled the number of eating places in the town!



The mine is one kilometre east of the town of Los Santos and there is a newly paved road to the mine gate.

### **The Los Santos Mine**

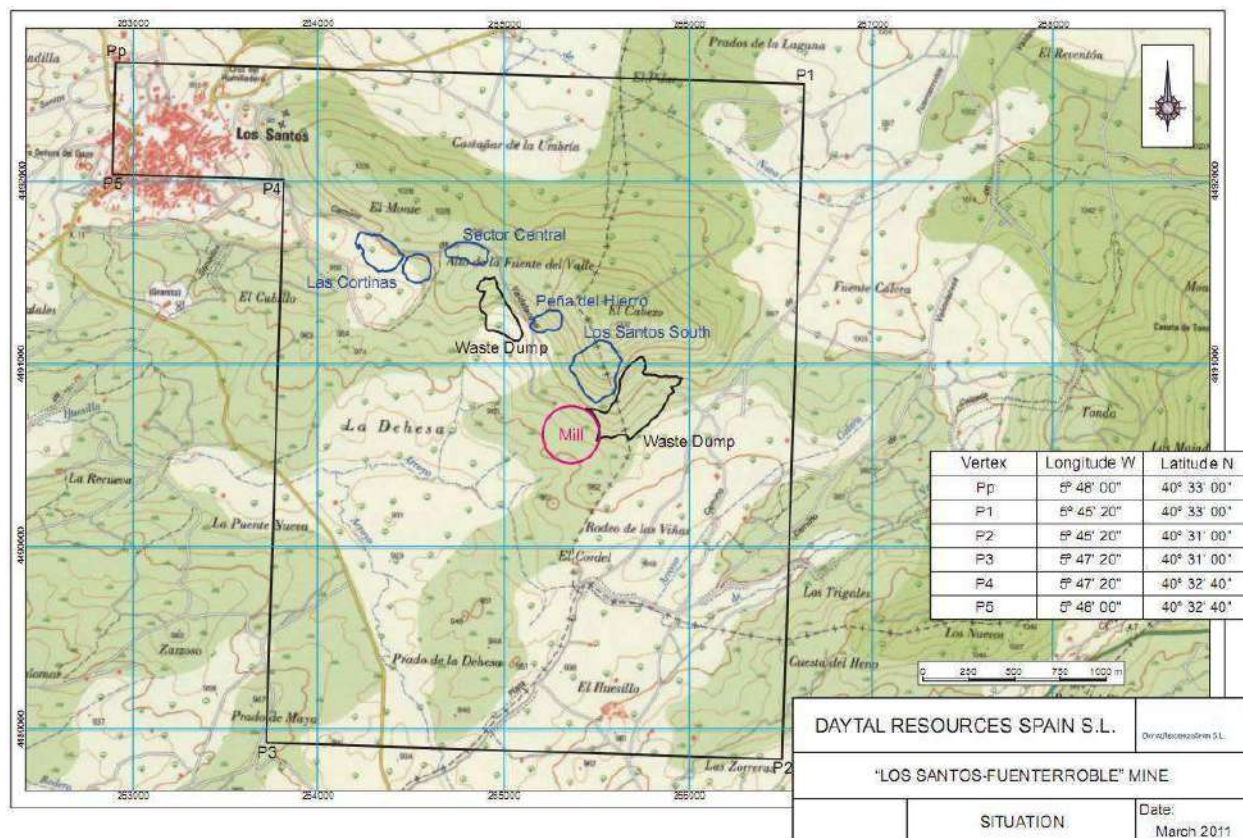
The Los Santos scheelite deposit was originally investigated by Billiton starting in 1979.

After 1980, Billiton completed an exploration campaign which included 249 trenches and 231 diamond drillholes. In addition in one of the zones, Los Santos

Sur, an 825m underground ramp was developed, along with level development at the 950m elevation, which provided bulk samples as well as underground drilling access. The ramp is still visible but has largely been consumed by the pit construction.



Billiton went as far as to carry out a pre-feasibility study of the prospect. By 1985, however, with a prevailing tungsten price of US\$81/mtu, the project was not considered viable.



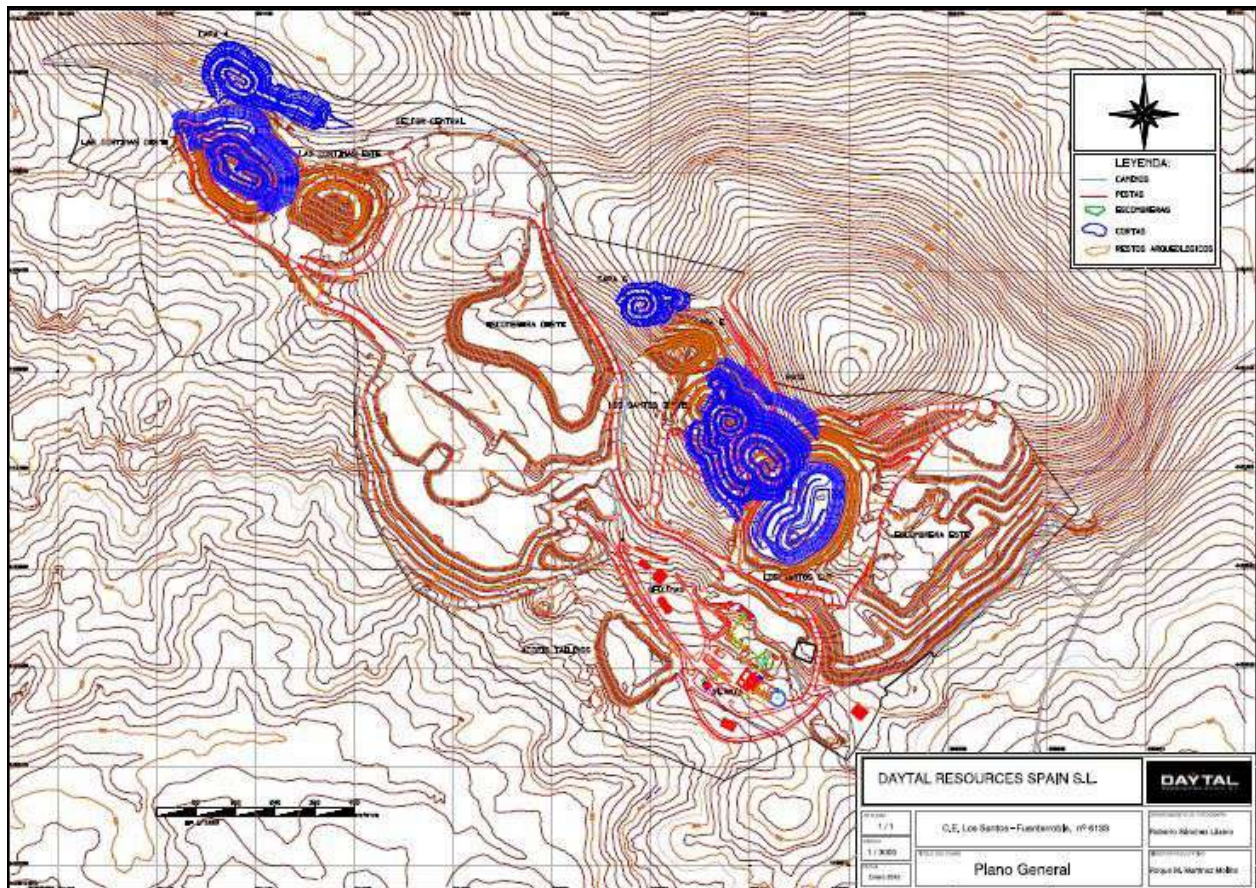
The project passed to the ownership of the ASX-listed company, Heemskirk. Under this new management the mine build began in 2008 and it was commissioned in July 2010.

## Geology

Under Billiton, exploration was focused on skarn mineralisation on the margin between the Bejar granodiorite and the surrounding Cambrian metasediments. The discovery of the Los Santos tungsten bearing skarns was the result of regional geological reconnaissance and the targeted night-time use of ultra-violet lamps to disclose the presence of the tungsten mineral, scheelite ( $\text{CaWO}_4$ ) which fluoresces under ultra violet light.

A period of intense exploration activity followed, including diamond drilling and some preliminary engineering including the aforementioned ramp.

The tungsten occurs mainly as scheelite within massive pyroxene skarn. The skarn bodies are generally narrow steeply dipping structures. The deposit is made up of a number of discrete zones, six of which have been modelled for the resource estimates in recent years. The strike length varies for each zone, but zone dips are fairly uniform across the deposit, varying between  $60^\circ$  to  $90^\circ$ . Within each zone, the skarn mineralisation is located within a number of individual beds, separated by barren lithologies. The major skarn beds vary between 2m and 20m in width; there are, however, numerous thinner bands measuring tens of centimetres.



The map above shows the minesite. Thus far one of the pits has been fully mined out and refilled. The blue represents the pits currently in production or planned. The two pits to the right (west) that nearly touch are intended to be combined into a sort of “super-pit” (well, not by Kalgoorlie standards) to exploit the mineralisation in the pit wall between the two existing pits.

## Resource

In October 2011, Almonty embarked on this drilling program at the Los Santos Project, the aim of which was to convert inferred resources into measured and indicated reserves, extend the minelife and to further delineate the nature of the resource at the Los Santos Project.

In 2013 Adam Wheeler was requested by Daytal to assist in the preparation of an updated NI 43-101 report. He has worked on resource and reserve estimation for Los Santos annually since 2006. The current report was prepared by Adam Wheeler, with assistance from Daytal staff, in order to present updated resource and reserve estimates as of the end of June, 2013. It was published in a report dated 31<sup>st</sup> October 2013.

<b>Los Santos Resource @ 0.05% WO3 cutoff</b>			
<b>Classification</b>	<b>Tonnes '000</b>	<b>WO3%</b>	<b>Tonnes WO3</b>
<b>Measured</b>	434	0.04%	1,735
<b>Indicated</b>	2,326	0.31%	7,139
<b>Inferred</b>	1,527	0.24%	3,648
<b>Total</b>	<u>4,287</u>		<u>12,522</u>

The goal was to prove up the potential high grade underground resource from the bottom of main Los Santos pit. There is said to be underground potential from 985 to 880 m delineated at 0.4% cut-off grade.

Basically the rule of thumb is once Almonty have established four years of reserves for its four year plan for a project it then strives to maintain that level converting inferred into indicated with on-going drilling.

<b>Los Santos Reserve @ 0.05% WO3 cutoff</b>			
<b>Classification</b>	<b>Tonnes '000</b>	<b>WO3%</b>	<b>Tonnes WO3</b>
<b>Proven</b>	357	0.45%	1,618
<b>Probable</b>	1,523	0.38%	5,791
<b>Total</b>	<u>1,880</u>		<u>7,409</u>

The principal operating costs used in connection with this reserve calculation were \$13/t ore for processing and administration, \$2.37/t ore for open pit mining, and \$30.42/t ore for underground mining. Of the total 1,880,000 tonnes of mining reserves, 1,767,000 tonnes of ore comes from four separate open pits and 113,000 tonnes of ore comes from underground workings.

<b>Los Santos - Dumps @ 0.05% WO3 cutoff</b>			
<b>Classification</b>	<b>Tonnes '000</b>	<b>WO3%</b>	<b>Tonnes WO3</b>
<b>Stockpiles</b>	66	0.25%	164
<b>Tailings</b>	1,932	0.16%	3,105
<b>Total</b>	<u>1,998</u>		<u>3,269</u>

The amount in the dumps is a not insubstantial amount at half the level of the current reserve in the ground. While the tailings grade is lower than current production grades from mined material.

## Mining

The open pit operations are conventional drill and blast operations, based on mining 10m benches in waste, and 5m benches in ore, with 0.5m of sub-drilling.

The aerial view below shows the main pit with the green structure to the left being the processing plant and the Los Santos South (Main) pit being the bright white patch just right of centre. Towards the town at the top of the photo is a smaller Las Cortinas pit that has been developed over the last few years.



The production mining & drilling operations currently employ 65 people and this task is undertaken by a contractor. All of the other 68 employees on site work directly for Daytal (Almonty's Spanish subsidiary).





For the moment plans for going underground have been discounted (while the price for APT remains where it is). In some ways the need for that strategy has been reduced by making the pits deeper and via the mini “super-pit” implementation. The solid nature of the mineralisation (see photo on page 4) allows steep (in some cases near 90°) pitwalls.

## Processing

The plant is located immediately to the south of the Los Santos Sur pit, near the existing underground portal, in an area close to existing mine workings, the main waste dump and other infrastructure. After initial operation with a production rate of up to 300 k tpa during 2010, the plant is now processing 500k tpa. The plant is primarily based on gravimetric separation, aimed at recovering scheelite, so as to provide a concentrate containing greater than 68% WO<sub>3</sub>.



The image above is our analyst with the plant management inside the processing facility with the rod mill shown below.

At the right can be seen scheelite concentrate running off one of the shaking tables under an ultra-violet lamp.

The process plant (shown on the following page) is primarily based on gravimetric separation, aimed at recovering a high grade scheelite concentrate.

The average grade of tungsten ore mined during the nine month periods ended June 30, 2015 has continued to trend back towards the average grade of the Los Santos mine. In addition, the ore mined returned to a more normal ore consistency and, as expected, tungsten recovery rates have continued to improve.

Tungsten recovery rates averaged 56.6% for the three month period ended December 31, 2014, averaged 58.7% for the three months ended March 31, 2015 and averaged 61.2% for the three months ended June 30, 2015.



Almonty anticipates that tungsten recovery rates will stabilize in the 60-65% recovery range over the remaining life-of-mine.



Production during the three months ended June 30, 2015, increased 10.7% and 18.75% when compared to the three months ended June 30, 2014 and the three months ended March 31, 2015 respectively.

MTU production during the three months ended June 30, 2015 continued to be robust as the tungsten recovery rate continued to improve when compared to the three months ended June 30, 2014 and March 31, 2015. The resulting increase in MTUs produced during the three months ended June 30, 2015, when compared to the three months ended June 30, 2014, combined with the Company's continued focus on cost control and its cost reduction program, led Euro and USD denominated cash operating costs to continue to decrease. Unit cash operating costs are anticipated to further decrease as the tungsten recovery rate improves.

The main plant is currently undergoing a meaningful expansion to debottleneck operations and boost concentrate grade and recoveries. This expansion has been rather rapid only beginning a few weeks ago and expected to be finished before the end of November. The extension is being added to the end of the main building closest to us in the photograph above (which was taken before work began). Below can be seen the frame that was up last week. Cladding is probably already finished by now.



The latest additions will double throughput from the finishing circuit and remove what the company terms the “last bottleneck” in its process. It is expected that the extra pieces of kit to be housed in the extension will hike recoveries from 65% to 69% and boost the  $WO_3$  content from 63% to 67%. Output will rise from 5 tonnes per day to 5 ¾ tpd (therefore a 15% increase). The additional equipment has enhanced the ability to reprocess the tailings stockpiles.

This added production will come at no increase in staff costs.

### **Tailings Reprocessing**

On another score the company has been considering the issue of tailings recovery. With the recent improvements in mill recovery, as well as the further improvements with the planned scheelite flotation facilities, an overall mill recovery nearing 70% should be achieved. This has meant that specific areas where tailings have been deposited still contain economic  $WO_3$  grades. The resource estimate from 2012 projected that there was 1.461mn tonnes of *in situ*  $WO_3$  grading at 0.17% recoverable in the tailings.

Almonty continued its work with third party consultants in evaluating its tailings reprocessing methodology. It initially tested reprocessing the tailings stockpile by blending tailings with fresh ore during Q1 2014 that yielded expected results and demonstrated that the Company’s approach to the reprocessing of the tailings stockpile was sound. Bulk testing of 100% tailings ore was run through the plant at Los Santos without any additional modifications. Recovery rates achieved exceeded expectations and management believes that target recovery rates for tailings reprocessing will be achieved when the tailings stockpiles are eventually reprocessed.

There is a third party report forthcoming which is expected to support the management’s view that it will be able to economically reprocess the tailings stockpile. The intention is to publish the third party

expert report upon its completion in the near future.

### Current Operating Performance

Below can be seen our earnings model for Almonty with our forward projections. It should be noted that the company has a September year end. This model factors in Los Santos production and the on-going ramp-up at Wolfram Camp. The latter will be discussed in future coverage.

Shares on issue have expanded due to the issuances for the Woulfe all-stock deal and the acquisition of Wolfram Camp from Deutsch Rohstoff A.G..

With the slide in the Tungsten price during 2015 we have lowered our previous earnings estimate for FY15 is to a loss of around \$2.29mn in post-tax earnings. We are presuming the same prices for Tungsten as currently reign however we feel these should probably start to trend higher after the first quarter of next year. This would represent negative EPS of 3 cts. In this context we expect no dividends in the current period.

<b>Almonty Industries</b>										
CAD mns (FY ending Sept)										
	FY16e	FY15e	3Q15	2Q15	1Q15	FY14	4Q14	3Q14	FY13	FY12
Revenue	43.70	36.52	8.73	10.27	8.72	29.61	8.45	7.37	18.34	21.64
Cost of Revenue, Total	28.40	25.80	5.55	8.38	6.34	10.29	3.07	5.01	11.4	11.11
Gross Profit	15.30	10.72	3.18	1.894	2.39	19.32	5.38	2.36	6.94	10.54
Selling/General/Admin.	5.68	5.77	1.35	1.70	1.42	4.38	1.44	0.90	3.08	3.33
Depreciation/Amortisation	8.34	7.67	1.56	2.62	1.96	4.61	0.00	0.00	3.45	4.86
Unusual Expense (Income)	0.00	0.00	0.00	0.00	0.00	0.00	-2.50	0.00	0.53	0.00
Total Operating Expense	42.42	39.24	8.46	12.69	9.71	19.27	2.01	5.91	18.45	19.37
Operating Income	1.28	-2.72	0.28	-2.42	-0.99	10.34	6.44	1.46	-0.11	2.28
Other, Net	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.93	-
Income Before Tax	1.28	-2.72	0.21	-3.20	-1.28	9.89	6.44	1.33	0.6	2.27
Tax	-0.22	-0.43	-0.06	0.00	0.00	-0.50	-0.50	0.00	-1.84	-0.15
Income After Tax	1.50	-2.29	0.27	-3.20	-1.28	10.39	6.94	1.33	2.44	2.42
Minority Interest	0.00	0.00	-0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net Income	1.50	-2.29	0.25	-3.2	-1.28	10.39	6.94	1.33	2.44	2.42
Diluted Weighted Average Shares	93.0	90.7	50.41	48.96	48.99	43.15	61.85	36.84	37.04	37.02
Diluted EPS	0.02	-0.03	0.00	-0.07	-0.03	0.24	0.11	0.04	0.07	0.07
Dividends per Share	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.00	0.00	0.00

For FY16 we are estimating a small profit of \$1.5mn (EPS of 2 cts per share) mainly driven by the aforementioned improvements at Los Santos and increased production at Wolfram Camp. A ball mill will be removed from the process at Wolfram Camp yielding further energy savings. The company is obviously a beneficiary of the current weak state of the Australian dollar which enhances margins.

### Shareholders

The company's propensity to (wisely) offer stock over cash as it accumulates producing and producible assets has resulted in a rather rapid change in the shareholder balance since we first covered this stock. In particular the acquisitions of the Wolfram Camp mine and the takeover of Woulfe Mining have brought an influx of chunky new holders. The Australian deal brought in Deutsche Rohstoffe A.G. as a

holder of between 21-22% of the current shares on issue. This Frankfurt listed entity is sort of a German version of Resource Capital, taking strategic stakes in projects in metals that it deems highly prospective. However, its management of Wolfram Camp was less than ideal and now the asset is in firmer hands and DR has become the largest individual shareholder and has a director on the board. The purchase of Woulfe brought on board its major shareholders, which included Korea Zinc (now with around 5% of Almonty), Dundee Asset Mgt (with 4%) and First Colonial (with 4-5%).

Then there are shareholders like Heemskirk (who originally owned Los Santos) with around 7% (or five million shares) and Fidelity with 4%. Management own well over 25% of the stock's common shares.

The one thing the stock does not have is any meaningful amount of Canadian retail investors (excepting those on-boarded via Woulfe) as Almonty has never raised money in the Canadian market.

### **AIM-Listing?**

One of the anomalies of Almonty is that it has a TSX-V listing and yet almost nothing else about the company is Canadian, particularly not either its managers or shareholder base. In light of this it would appear a natural step that the company gets itself a primary listing on the AIM and forsakes the Canadian market which brings it little or no benefit. Do not be surprised if there are developments along these lines.

### **Risks**

The risks for the Tungsten space in general. These are:

- An extended period of a weak Tungsten price
- Failure of the Tungsten story to reignite when mining market returns to general interest
- Weakened global industrial demand (particularly in tools) that would soften prices and volumes
- China skewing the market in some way to again create distortions in prices and trade patterns

Most of these risks are different sides of the same price prism, with the exception of the market's perception/ disinterest in Tungsten.

Market chatter indicates that China's SRB have bought 10,000 tonnes of concentrate (approx. one third of the post-FANYA stockpile) and that eight large producers are reducing about 20% of their concentrate output and will not release supply to market until end of January next year. These are positive underpinnings to the current price and hopefully an impetus for a price turnaround.

Financing remains difficult and dilutive when it takes place. The only way to harvest the attractive prices is to be in production and the only way to do that is to finance mine-builds/reactivations. Almonty is leading the way in using cashflow to build its business rather than keep going back to the well with financings.

### **Conclusion**

Los Santos is clearly the milch-cow that feeds the rest of the Almonty empire. With its reserve, its

stockpiles, it tailings to rework and the planned mini- “super-pit”, it should have another four years mine-life at least. Wolfram Camp’s turnaround has essentially been funded by Los Santos as has the Valtreixal mine plan. Planning is already advanced for Valtreixal to pick up the slack and use equipment and personal form Los Santos as it becomes available. Then there is the Sangdong mine which really awaits a price turnaround to fire up its motors.

Almonty’s management team, last decade, managed to get one Tungsten producer off the ground and now they are on their second go-around. This time they aren’t building to sell it but rather putting together a long-term producer and creating that hitherto elusive investment opportunity, a geographically diversified multi-mine Tungsten player.

We regard Almonty as undoubtedly the long awaited consolidator in the Tungsten space and therefore reiterate our **Long** position with a twelve-month price target of \$1.12.



## Important disclosures

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