

CREDIT OPINION

6 January 2017

Update

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RATINGS

Volcan Compania Minera S.A.A. y Subsidiarias

Domicile	Peru
Long Term Rating	Ba3
Type	LT Corporate Family Ratings
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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Volcan Compania Minera S.A.A. y Subsidiarias

Update Following Upgrade to Ba3

Summary Rating Rationale

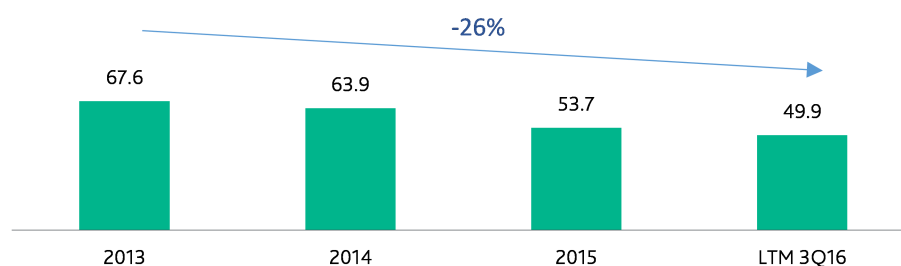
Volcan's Ba3 ratings reflect the company's competitive cost position (first-quartile C1 zinc and silver cash costs), its operational diversity in terms of metals produced and number of mines -12 mines distributed in five operating units-, and the company's position as a leading producer of zinc, silver and lead globally.

Constraining the company's ratings are its narrow liquidity position to cover its short-term debt and still relatively weak free cash flows, although we expect free cash flows to become and remain positive in the next quarters, provided prices do not fall to the low levels observed in December 2015/January 2016 and absent any material increase in capital expenditures and/or dividend distribution. Volcan's low geographic diversity and its relatively modest revenue size, as compared to global peers, are further constraints.

The upgrade to Ba3 on January 5, 2017 reflected the improvement in Volcan's credit metrics observed during 2016, as a result of both higher metals prices, as well as the company's efforts to reduce costs and maintain an adequate liquidity profile. Volcan's credit metrics posted a significant recovery throughout 2016, with adjusted EBIT margins of 17.8% in LTM ended September 2016, and 24.6% in 3Q16 alone, which favorably compares to 6.8% in 2015. Part of the recovery in operational performance can be explained by market conditions -- in 2016 average realized zinc prices were USD 0.95/lb. (USD 1.08/lb. in 2H16), which compares to USD 0.88/lb. in 2015 (USD 0.79/lb. in 2H15). But the recovery can also be attributed to Volcan's cost reduction initiatives -- costs declined 26% in the 2013-2016 period, reflecting a number of initiatives which include mine optimization, personnel layoff, negotiation with contractors, and continued investments in its energy portfolio.

Exhibit 1

Unit Cost (USD/MT)



Source: Volcan's earnings release

Credit Strengths

- » Leading producer of zinc, lead and silver globally, with good diversity of metals and mines
- » Competitive cost position positioned in the first quartile of the cash cost curve (for zinc and silver)
- » Lower capital expenditures, cost reduction efforts and favorable market fundamentals (for zinc) leading to positive free cash flows

Credit Challenges

- » Relatively modest revenue size as compared to global peers
- » Low geographic diversity
- » Exposure to commodity prices leading to earnings volatility
- » Tight cash balance to cover its short-term debt

Rating Outlook

The stable outlook reflects our view that Volcan will be able to improve its liquidity and sustain adequate credit metrics. As well, it incorporates the expectation that zinc market fundamentals will remain solid, which will allow Volcan to generate positive free cash flows and reduce short term debt overtime. The stable outlook also considers that Volcan will target its pipeline of exploration projects, maintaining its discipline regarding costs, capex and dividend distribution. The outlook assumes that should prices retreat, the company will make the necessary adjustments in its operations and capital spending to maintain its financial profile.

Factors that Could Lead to an Upgrade

An upward rating movement would require Volcan to improve its liquidity cushion by reducing short-term debt levels, maintain its competitive cost position and continue to invest for growth without jeopardizing its liquidity and leverage metrics. To the extent that Volcan is able to maintain a sound liquidity profile, to reduce its reliance on short-term debt and to achieve cash flow metrics such as (CFO-Dividends)/debt above 20% on a sustained basis, the ratings could be positively impacted.

Factors that Could Lead to a Downgrade

Ratings could be negatively impacted if profitability and cash flow from operations materially weaken. A marked deterioration in the company's liquidity position could also precipitate a downgrade. Specifically, if EBIT margin falls below 6%, with negative free cash flow, ratings could be downgraded. Negative pressure could also result from increase in debt levels leading to total debt to EBITDA above 4x on a sustained basis.

Key Indicators

Exhibit 2

Volcan Compania Minera S.A.A. y Subsidiarias

	9/30/2016(L)	12/31/2015	12/31/2014	12/31/2013	12/31/2012
Revenues (USD Billion)	\$0.8	\$0.8	\$1.0	\$1.2	\$1.2
EBIT Margin	17.8%	6.8%	18.3%	24.0%	31.2%
Return on Average Tangible Assets	6.1%	2.4%	8.7%	13.8%	23.5%
EBIT / Interest Expense	3.7x	1.4x	6.4x	13.5x	10.7x
Debt / EBITDA	3.2x	3.9x	2.3x	1.8x	1.4x
Debt / Total Capital	40.3%	41.3%	32.9%	30.4%	31.5%
(CFO - Dividends) / Debt	14.9%	18.9%	20.1%	28.4%	22.8%

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.

Source: Moody's Financial Metrics™

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Detailed Rating Considerations

DIVERSITY OF METALS AND MINES, AND LOW COST POSITION SUPPORT ITS CREDIT PROFILE

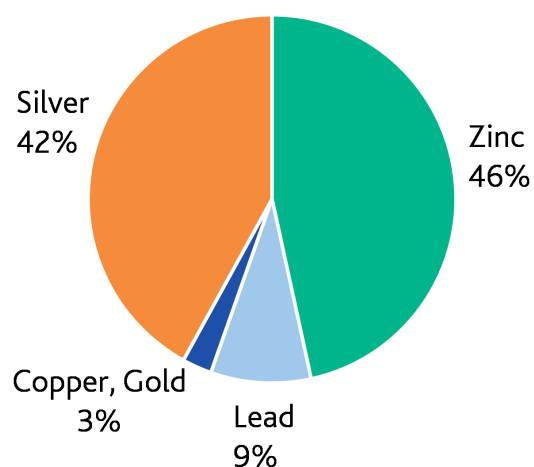
Volcan is the leading producer of zinc, silver and lead in Peru, and a major player for these metals globally. Moreover, Volcan has a favorable mix of metals, which provides good diversification and low price correlations in a normalized environment.

Volcan also enjoys good operational diversity, with five main operational units at Yauli, Chungar, Cerro de Pasco, Oxides and Alpamarca-Rio Pallanga, in the central region of Peru. It produces its metals from 12 different mines and also has seven concentrate plants and one leaching plant for silver oxides production.

Volcan's credit metrics posted a significant recovery throughout 2016, with adjusted EBITDA margins of 40% in 3Q16 and 33.4% in LTM ended September 2016, still incorporating the weak 4Q15, when EBITDA margins reached a low of 15.7%. Not only the good performance of zinc prices supported better margins, but Volcan obtained important reduction in costs overtime (26% decline compared to 2013 levels), attained through mine optimization, review of scope and number of contractors, rationalization of inputs/ raw materials, including energy, and the start-up of low-cost units, such as the oxide plant and Alpamarca. In 2017, Volcan will continue to invest in cost reduction through logistics/transportation and also by targeting exploration and mine development, an area which remained subdued in 2015-16 during the market downturn.

Exhibit 3

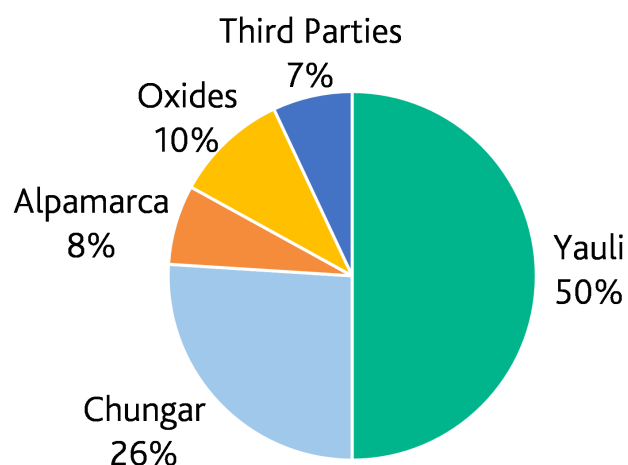
Revenues by Metal 9M16



Source: Volcan's earnings release

Exhibit 4

Revenues by Operating Unit 3Q16



Source: Volcan's earnings release

MARKET FUNDAMENTALS SUPPORTIVE OF ZINC PRICES

Zinc prices increased by 60% in 2016, closing the year at USD 1.17/lb., a trend that intensified in the second half of the year. Average prices in the full year 2016 were at USD 0.95/lb., while 2H16 average was at USD 1.08/lb. Higher prices reflect positive market fundamentals, as zinc production declined in 2015-16 as a result of mine closures (such as MMG's Century mine in Australia and Vedanta's Lisheen mine in Ireland, the two mines had a combined output of around 600 kt) as well as supply curtailments from major players such as Glencore, which has removed about 500kt of zinc concentrate from the market. Since 2013, more than 1 million tonnes of zinc production has gone offline. In addition, we could see further mine closures in China (about 40% of global zinc supply) for environmental reasons.

According to the International Lead and Zinc Study Group (ILZSG), the global market for refined zinc metal was in deficit by 277kt from January to October 2016, with inventories falling by 53kt over the same period. Global zinc mine production declined by 1.8% y-o-y in the same period. Demand, in turn, recovered during 2016, in particular with an upturn of the auto industry, supported by purchasing tax reductions, and property sector in China, which increases demand for building materials and household appliances. China accounts for about 50% of zinc's demand worldwide.

The risk for zinc prices is a deceleration in demand and/or players such as Glencore bringing back idled capacity to the market. Although high zinc prices can accelerate expansions, there aren't many projects coming online in 2017 – Antamina is one of the few, and will bring an additional 150-170kt in 2017, according to its mine plan.

RESERVE POSITION AIDED BY VALUABLE EXPLORATION PROPERTIES AND EXPANSION PROJECTS

Volcan has a reserve position of approximately 8 years at 2015 production levels - and 20 years considering reserves and inferred resources. However, the company holds significant exploration properties in mineral rich locations and there is a high potential to improve over time as long as the company continues its exploration activities and strategic investments.

Exploration projects comprise brownfield and greenfield explorations distributed along the existing mining units (Yauli, Chungar, Oxides, Cerro de Pasco and Alpamarca), focusing on Yauli and Chungar, which currently account for 75% of Volcan's revenues. Volcan is also targeting copper projects, which would allow for further diversification. However, expansions will be analyzed in a selective manner and dependent upon market conditions. The company completed its large expansion projects, which include the Alpamarca-Río Pallanga mining unit, and a oxide-treatment plant at Cerro de Pasco, in 2014, and has more recently concluded the investment in the Rucuy hydroelectric plant, which allows Volcan to sell energy in the grid and at the same time maintain self-sufficiency of about 48% for its energy needs, at a much lower cost.

Liquidity Analysis

Volcan has maintained a cash balance close to USD 200 million in the past couple of years, a period in which the amount of short term debt has increased. Although the short-term lines have a low cost, they increase liquidity risk. Volcan's cash balance of USD 184 million at September 30, 2016 covers its short-term debt of USD 252 million by 73%. Apart from short-term maturities, debt profile is quite comfortable as the bonds due 2022 represent 65% of total debt.

Free cash flows have been negative since 2012 as a consequence of higher capex (silver oxides plant at Cerro de Pasco and Alpamarca) and weaker FFO, in particular in 2015. In 2014, operations started at the greenfield Alpamarca unit, as well as at the Cerro de Pasco oxide plant, which reached full capacity in June 2015. In the low price environment observed in 2015/early 2016, Volcan suspended expansion/exploration investments to preserve liquidity. Capex reached a low close to USD 120 million in 2016, and will gradually increase in the coming years as Volcan resumes investments in exploration projects, which is essential to ensure the company's long-term operational viability. We expect Volcan will target its pipeline of exploration projects, maintaining its discipline regarding costs, capex and dividend distribution. We expect the company to maintain a minimum cash balance of USD 100 million for operating purposes.

Leverage has increased mostly as a result of lower EBITDA, while debt levels have remained around USD 820-825 million between 2014 and 2016. Adjusted EBITDA, in turn, reached its lowest level in 2015 (USD 210 million), which has led adjusted leverage (measured by total adjusted debt/EBITDA) to peak at 3.9x in 4Q15 and 1H16. We expect Volcan's leverage to be in the range of 2x - 3x in the next 12-18 months, supported by higher profitability coming from higher metal prices and sustained competitive cash cost position.

Profile

Volcan is a Peruvian mining company with exploration, mining, concentrating and commercial operations. It primarily produces zinc and lead concentrate and some copper concentrate, all with high silver content. The company operates through five operational complexes with a total of 12 mines, 7 concentrate plants and one leaching plant for silver oxides production. All of Volcan's operations are located in Peru (A3 stable) and, for the LTM ended September 2016, it reported revenues of USD 777 million. Volcan is a holding company listed in the stock exchanges of Lima and Chile and in Madrid's Latibex.

Rating Methodology and Scorecard Factors

Based upon Moody's rating methodology for the global mining industry published in August 2014, Volcan's grid indicated rating maps to a "Ba2" rating category on a three year historical basis through the twelve months ended September 30, 2016. The mapped rating is driven by Volcan's solid EBIT margins and adequate leverage and coverage metrics over this time frame. The forward rating view anticipates that Volcan will sustain adequate credit metrics for a "Ba" rating. The assigned rating of "Ba3" places additional emphasis on the company's small size compared to peers, liquidity and cash flow metrics.

Exhibit 5

Rating Factors

Volcan Compania Minera S.A.A. y Subsidiarias

Mining Industry Grid [1][2]			Current LTM 9/30/2016		Moody's 12-18 Month Forward View As of 1/4/2017 [3]	
Factor 1 : Scale (20%)	Measure	Score	Measure	Score	Measure	Score
a) Revenues (USD Billion)	\$0.8	Caa			\$0.8 - \$1.5	Caa
Factor 2 : Business Profile (20%)						
a) Business Profile	Ba	Ba			Ba	Ba
Factor 3 : Profitability and Efficiency (15%)						
a) EBIT Margin (3 Year Avg)	15.4%	A			16% - 20%	A
b) Return on Average Tangible Assets (3 Year Avg)	6.1%	Ba			6% - 8%	Ba
Factor 4 : Leverage and Coverage (35%)						
a) EBIT / Interest Expense (3 Year Avg)	4.0x	Baa			4x - 6x	Baa
b) Debt / EBITDA (3 Year Avg)	2.8x	Baa			2x - 3x	Baa
c) Debt / Total Capital	40.3%	Baa			30% - 40%	A
d) (CFO - Dividends) / Debt (3 Year Avg)	21.8%	Ba			20% - 25%	Ba
Factor 5 : Financial Policy (10%)						
a) Financial Policy	Ba	Ba			Ba	Ba
Rating:						
a) Indicated Rating from Grid		Ba2				Ba2
b) Actual Rating Assigned		Ba3				Ba3

All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures. As of 9/30/2016(L).

Source: Moody's Financial Metrics™

Ratings

Exhibit 6

Category	Moody's Rating
VOLCAN COMPANIA MINERA S.A.A. Y SUBSIDIARIAS	
Outlook	Stable
Corporate Family Rating	Ba3
Senior Unsecured	Ba3

Source: Moody's Investors Service

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