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Muddy Waters is Short on Asanko Gold Inc. (AKG:CN)

Report Date : May 31, 2017	• We are short AKG because we believe it is
Report Date. May 51, 2017	 We are short AKG because we believe it is highly likely to end up a Zero.
Company:	
Asanko Gold Inc.	• On the back of flawed geology, AKG made
	investments in Nkran, its satellite pits, and
Ticker:	Esaase that we believe will never be
AKG CN (AKG US)	recovered.
Industry: Mining	 Nkran is already experiencing a serious collapse of its west wall that we believe is a
	sign of AKG's desperation. We estimate AKG
Stock Price: C\$2.52	needs to spend \$75 - \$115 million soon to
Market Can. CÉ512 million	keep mining Nkran, or the mine will "pinch
Market Cap: C\$512 million	out". Spending the money likely means AKG
Float: 198.7 million shares	will run out of liquidity in 2018; not spending
	the money leaves the company without the cash flow to develop its largest deposit,
	Esaase.
	• AKG's "satellite deposits" are unlikely to yield
	significant cash flow, due to likely flawed
	geology. In a December 2016 upgrade to
	their resources, AKG used a record gold price
	- \$2,000/Oz - to boost their estimated value.
	This is only one of the serious flaws we see.
	• There are indicia that some of AKG's
	resources models have been "smeared",
	which would cause estimates of their ore
	contents to be inflated.
	 Management is outwardly assured and
	confident, but their behavior reeks of desperation and short-termism.

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Introduction: AKG is Highly Likely to End Up a Zero

We are short Asanko Gold Inc. ("AKG") because it is highly likely to end up a Zero. Flawed geology led to investments in Nkran, Esaase, and various satellite deposits that in our view are unrecoverable. We see the company as trying to stave off the inevitable, and unsustainably mining Nkran in a desperate search for cash flow. The company is looking to Nkran's satellite deposits to bridge the gap, but we see little chance that the satellite deposits save the company. We expect AKG to run out of cash in 2018 while trying to service \$165 million of debt. The best-case medium-term scenario seems to be an extremely dilutive equity raise, possibly approximating half of AKG's market cap. The worst case scenario – and not a remote one in our view – is bankruptcy. Regardless, we think that eventually AKG is highly likely to become a Zero.

Nkran could be on the verge of two discrete, but related, calamities: Major wall collapse or "pinching out". Significant portions of Nkran have already collapsed. There has been a failure in the west wall that management has described as "little" and "tiny".¹ However, satellite and drone imagery shows the wall failure and impact on the ramp is likely quite serious. The collapse is approximately 250 meters long, and has caused an approximately 175 meter to 200-meter section of the ramp to begin sliding into the pit. The same imagery shows there are mine wall failures in almost every direction, making it quite possible that additional major failures of the mine's upper and mid-levels are just a matter of time. Over the next five months, Ghana will go through its two rainy seasons (May – July and August – October).² Even without a collapse, AKG will highly likely need a significant pushback of the west or east wall to continue accessing ore from the pit through 2018. We estimate that a pushback that allows AKG to access new ore bodies would cost \$75 to \$115 million.

Nkran might be about to "pinch out", in which case its remaining LoM could be less than six months, or just 25% of the original plan. "Pinching out" is when the costs of additional mining exceed its expected revenue – i.e., it is not profitable to mine further. If Nkran pinches out, we do not see how AKG could fund Esaase or any other development that might move the cash flow needle. AKG has found significantly less gold in Nkran than expected. The original plan called for it to "slow-mine" Nkran,³ which would have entailed regular wall pushbacks to make the wall slopes more gradual. After the initial mining turned out to yield less gold, AKG responded by aggressively mining into the "guts" of the ore body.⁴ In doing so, it abandoned plans for ongoing wall pushbacks. Nkran has now been mined into a steep "V" shape. The lowest level of

¹ AKG, Q1 2017, Earnings Conference Call

² The Kumasi region of Ghana where Nkran and its other deposits are primarily located is characterized as hilly terrain dissected by broad, flat drainages that typically form swamps in the wet season. It is in a Wet Evergreen Forest Zone and has two monsoon seasons. The first run from May through July and the second from August to October. Additional heavy rains can also sporadically occur before or after these periods. For more information see AKG 2016 Annual Information, p. 44. Also, Ghana Rain Watch:

http://www.meteo.gov.gh/website/index.php?option=com_docman&task=doc_download&gid=5&Itemid=85

³ This is evident from the original 2015 Mine Plan (presented numerous times, e.g. 2015-02-20 BMO Conference Presentation, p.5) wherein Nkran is depicted as delivering "consistent annual operating volumes" of ore from 2015-2027, with 20-25 million tons of ore being extracted per year until 2022 at which time the rate would slow to 5 million tons per year through 2026 and the tail off in 2027.

⁴ AKG, Technical Presentation, 2016-05-11, p.30.

its pit floor is a skinny, irregular shape, only \sim 65 meters at its widest point and narrowing to about half that at either end. AKG might have as few as two benches of depth (at 18 meters per bench) in Nkran that it is able to mine.

With uncertainty hanging over the quantity and quality of ore below, the company faces a dilemma: should it risk running out of money by pushing back the walls, or admit defeat and move on from Nkran, but likely without the liquidity needed to generate meaningful cash flow from its other resources? As of the end of FY16, Nkran has significantly underperformed the original 2015 mine plan despite mining so aggressively as to have removed 19% more ore than planned. There was an -11% short fall in total gold production.⁵ Recent disclosures cause us to think the company will deem Nkran as pinched out, and it will therefore abandon the project. In that case, if the 2.7 million tons of ore and 166,000 ounces recently reported as being accessible with minimal additional cost is all the mining management intends to complete at Nkran, then Nkran's remaining LoM could even be less than half a year (which would reduce Nkran's LoM to one-fifth or less of its original plan).⁶

The satellite deposits will not save AKG in our view. Nkran's poor performance has meant that AKG lacks the cash flow to Esaase. This has seemingly caused AKG to focus on small low grade "satellite deposits" to plug the hole. Over the last year, AKG has repeatedly shuffled its satellite mine development plans, fast-tracking mines with near surface ores apparently to generate some cash flow. Since Q2 2016 the satellite plan has changed on an almost bi-monthly basis. The demotions of once promising deposits imply expected economics that are much worse than stated in AKG's Mineral Resource Estimates (MREs). These frequent changes also signal the company is desperate. We believe these deposits will follow Nkran in disappointing due to flawed geology.

We see AKG root problem as flawed geology. The most recent evidence of the poor geology is the newest Nkran pit model, which significantly decreased the reserve estimates.^{7,8} An expert report we reviewed on the history of AKG's MREs and other technical reports was highly critical. The experts found significant flaws and omissions in the assumptions and methodologies, including possible "smearing" of the mineral resource model. The report strongly suggests that critical flaws remain in the pit models for Nkran, Esaase, and the original satellite deposits including Dynamite Hill, which until May 23, 2017 was the satellite first in-line

⁵ Per the FY15 MD&A, total ore mining for 2016 was to be 3.943 million tons, from Q1 through Q4 4.676 million tons of ore were reported as mined (Q4 2016 earnings presentation, p.5, Q1 2016 MDA p 12). Total 162,838 oz in total vs. the 182,428 in the Mine Plan reported in the 2015 Full Year MDA, p. 11). This includes 15,337 oz of gold recovered predominantly from inferred ounces in Q1 2016 which should not be depleted from its reserves/ resources.

⁶ Based on recent mining rates which are predicted to remain unchanged. As reported the strip rate for these is 2:1 (Q1 2017 conference call).

⁷ AKG, Technical Presentation, 2017-02-24. Nkran's reserve ounces were downgraded by 22.6%, a loss of 430,000 ounces of gold.

⁸ The "pit model" refers to the mineral resource block model which generates a geological 3D model based on data input from drilling of the deposit area, but as interpreted and adjusted per algorithms, design parameters, and the discretion of geologists who create it. In this report these 3D geological models may alternately referred to as a "block model", a "pit model", or "model."

to be developed.⁹ In February 2016, AKG hired Philip Bentley as its Executive for Geology and Resources. Mr. Bentley was the VP of Geology and Exploration of the spectacularly collapsed Great Basin Gold (GBG). He was named as a defendant in a lawsuit over that collapse. We wonder why out of all the potential geologists AKG could have hired, it settled on Mr. Bentley.

AKG is significant risk of a liquidity crisis in 2018. The company's liquidity is limited to only \$48 million of cash on hand, and it has zero availability on its \$150 million revolver, which has accrued interest.¹⁰ If the company pushes back the collapsed wall at Nkran, we estimate it would consume \$75 million to \$115 million. Using company-favorable assumptions, we believe the company will have a 2018 cash short fall ranging from -\$43 million to -\$129 million in 2018.

If investors are surprised by the foregoing conclusions, they can be forgiven. Management has often painted a "puppies and rainbows" picture of its operations, putting positive spins on news that should be unambiguously bad for the company. This includes having made the spurious claim that no material change to its "global" MRE was justified.¹¹ One of AKG's most brazen deceptions has been trying to convince the market it is "conservative" and its planning is "bullet proof."¹²While management outwardly exudes a sense of calm, we see a management that is desperately flailing around in search of cash flow.

AKG investors appear to have been comforted by the backgrounds of chairman Collin Steyn and CEO Peter Breese. The pair previously sold LionOre Mining International Ltd. and Mantra Resources Limited for significant gains in 2007 and 2010, respectively.¹³ However, a soberer assessment of their track record is that the buyers in each case were undisciplined, and it was in the midst or tail end of a bull market for the underlying commodity.¹⁴ There have since been a series of write downs and failures at Lion Ore, and Mantra has never gone into production. The pair's investments in Coalspur and Mirabella Nickel have been greatly disappointing.

We doubt the company can avoid an expensive debt restructuring in the next 12 - 18 months. Management contends its cash flow and liquidity are sufficient to cover its near-term obligations and capital expenditure plans, and hopes to renegotiate an already onerous 7% interest rate.^{15,16} However, it appears far from capable of generating enough cash to make repayment of the already once extended loan (currently at \$165 million).

Nkran: Putting AKG Between a Rock and a Hard Place

⁹ The satellite deposits are also known as the Obotan deposits: Adubiaso, Adubiaso Extension, Abore, Asuadai, Dynamite Hill, Nkran Extension.

¹⁰ AKG, 2016 Annual Information, pp.16,19. The first payment of approx. \$18 million is due on July 1, 2018 followed by nine equal quarterly instalments, with the last payment being made on July 1, 2020. In 2017, the company accrued an additional \$17 million in interest at an effective interest rate of 10.6%.

¹¹ AKG has promised to release a revised LoM in June of 2017.

¹² AKG, Q1 2017 conference call. 2017-05-04

¹³ "Norilsk gains control of LionOre," Financial Times, 2007-06-30

http://archive.rosatom.ru/en/presscentre/news/993e92804510d3d18058a0e0d43de87e

¹⁴ Nickel reached an all-time high of 54050 in May of 2007

¹⁵ AKG, Q1 2017 Earnings Presentation, 2017-5-04, p. 10, 2016 AR, p. 30

¹⁶ AKG, Q1 2017 conference call. 2017-05-04

Our investigators in Ghana spoke with 21 sources who have extensive knowledge of the Nkran mining operation. These sources detailed serious concerns with the condition of the Nkran pit, where wall collapses have blocked access to the west ramp for over one month. This is a problem for AKG, which is now left with a single functioning ramp as it enters Ghana's peak rainy season. The severity of this problem is magnified by cracks that have also appeared along the north, northeast, east, and southeast walls; and, which continue to present problems in the northwest and southwest corners. Further, there have been smaller collapses in the pit. Even in a scenario without additional wall failures, we estimate that Nkran may have as few as two benches of additional depth (at 18 meters per bench) that can be mined before "pinching out".

Nkran is already experiencing serious wall collapses

Ghana's monsoon season has two peaks commonly falling in May/June and August/September.¹⁷ This year the heavy rains started in April. Based on our review of satellite imagery, there are at least three areas in the pit that experienced major failures due to the 2016 rains.



SE Corner of Nkran Pit (Before) March 2016



SE Corner of Nkran Pit (After) March 2017

¹⁷ <u>http://www.meteo.gov.gh/website/index.php?option=com_docman&task=doc_download&gid=5&Itemid=85</u>.



NE Corner of Nkran Pit (Before) May 2016



NE Corner of Nkran Pit (After) May 2017

May 2016 satellite imagery shows that the southern section of the west wall appears also to have started to fail even earlier.

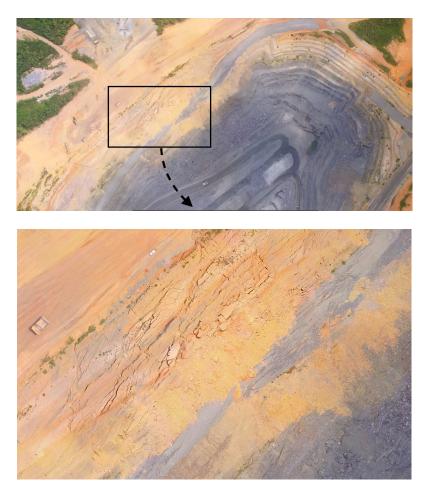


SW Corner of Nkran Pit, May 2016

The west wall collapse is a problem because it limits access to one functioning ramp even before the start of the peak rainy season. Several sections around the east wall above and below its ramp are also exhibiting signs of stress and being at a risk of further collapse. A failure along the east wall would be a severe issue for AKG because it would cut off access to the ore at the pit bottom. To stabilize the west wall and rebuild a new access ramp would require a large push at great expense. AKG has not publicly estimated the tonnage involved in moving the walls back, but we believe it would exceed 37 million tons in order to expand the surface area of the pit and continue to access new ore zones at Nkran.

The west wall collapse is not trivial

Nkran has recently experienced a 250-meter long collapse of the west wall, which according to our sources, has completely cut off access to the pit from the Western ramp since early April 2017. An approximately 175~200 meters long section of the west ramp appears poised to slide into the pit. The image below was taken on May 1, 2017.

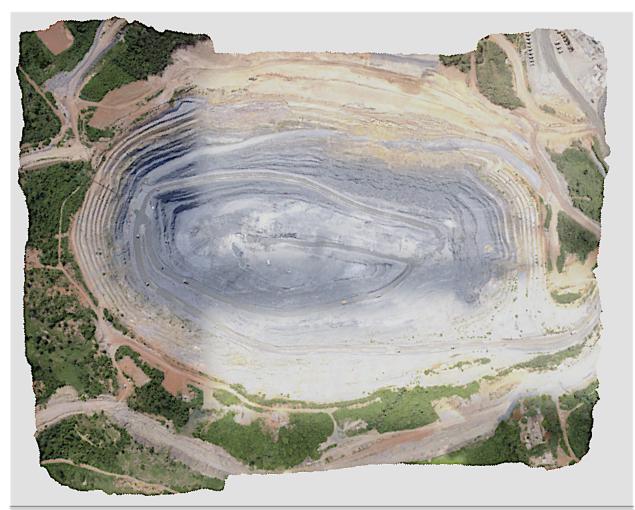


Close Up View of Nkran Pit West Wall Collapse, May 1, 2017

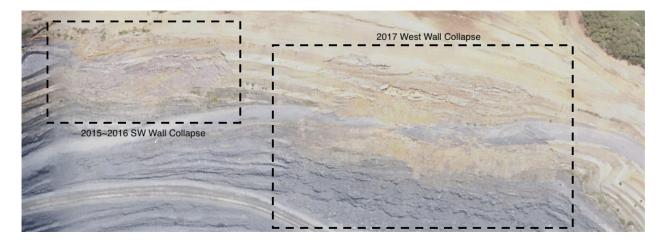
Contrary to the narrative from management who, described the collapse as "just a little tiny portion of the pit ramp" and stated "the sidewall failure [as] very similar to the one [it] had last year"¹⁸, this collapse impacts roughly a quarter of the pit's rim. AKG appears to have been unable to access the west ramp throughout May because of the wall failure. AKG claimed the collapse has had no impact on operations, however, our sources indicated that with just one ramp in operation, the trucks entering and exiting the pit have encountered problems with bottle necking.

¹⁸ AKG Q1 2017 earnings call 2017-05-04, we believe management is referring to the sliding occurring in the SW Corner.

In mid-May, **after** the Q1 2017 earnings call, we dispatched a second drone to survey AKG's response to the wall collapse. As is visible in the image below, the west access ramp has continued to deteriorate and appears inoperable. An operation along the west rim is expanding, likely intended to remove weight (and therefore stress) to prevent another large or even catastrophic failure.



Above: Nkran pit May 11, 2017 drone image



Above: Nkran pit May 11, 2017 drone image, west wall close-up

The west wall collapse is a sign of AKG's desperation

Despite seemingly being aware of the impending collapse of the west wall, AKG did not complete a pushback of the wall. Instead, it focused on mining the guts of the ore body. We see this behavior as extremely short-termist, and indicative of desperation.

As shown above and below, by no later than Q1 2016, cracks large enough to be visible by satellites appeared along the upper areas of the pit. Two such cracks were located in areas where walls eventually collapsed during last year's rainy season. The fourth area with significant visible cracks and fissures is along the upper section of the west wall that just failed.



AKG warned the market about the possibility of losing the Nkran pit on the Q3 and Q4 2016 conference calls. AKG's apparent failure to act in the face of the risk of new wall collapses in 2017 reeks of desperation. In the Q4 2016 conference call, AKG management stated (emphasis added):

"As explained last quarter, we have introduced a number of measures designed to mitigate the risk associated with a single-pit operation in a high rainfall area with deep levels of weathering. This places the mine at risk and could cause us to lose the pit for an extended period of time..."

Despite seemingly being aware of the instability along the western edge of the pit for over one year, AKG's solution was not to adopt the seemingly obvious and necessary step of pushing back the pit rim and properly stabilizing it during the dry season, but to dig deeper, faster.²⁰ Digging deeper, faster carries is risky because it increases the slope of the pit walls and increases the risk of collapse. AKG then downplayed the significance of the wall collapses on the Q1 2017 call.

Nkran might "pinch out"

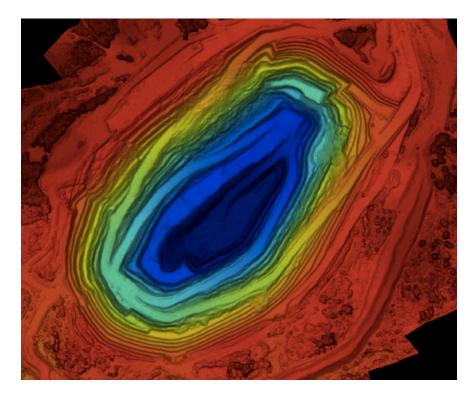
The company's response to finding significantly less gold than estimated at Nkran was to aggressively mine the "guts" of the ore body. In doing so, it abandoned plans for ongoing wall pushbacks that would have allowed the company to slow-mine and slowly monetize what had been planned as a rich deposit.²¹ Now Nkran has now been mined into a steep "V" shape.

We believe that the Nkran pit floor is fast becoming too narrow to mine, a condition known in the industry as "pinching out". At the point a mine pinches out, it is no longer economically viable to spend the additional capex required because the costs of moving waste rock are greater than the value of the ore being extracted. Because of AKG's aggressive mining, The lowest level of its pit floor is currently ~200 meters below the surface and less than ~65 meters at its widest points and narrowing to less than ~30 meters at its northeastern end.²²

¹⁹ AKG, 4Q16, conference call, 2017-03-16

²⁰ Not making the repairs during the dry season and awaiting the resumption of heavy rains makes earth moving less efficient (slower and more costly) but also risks further destabilization by adding weight and stress to areas already displaying compromised structural integrity. For more information on the decision to dig deeper and skimp on wall pushbacks see "Early mining challenges" in the Technical Presentation dated 2016-05-11, pp. 30-31. In May of 2016, AKG reported that an additional wall pushback was done on the west wall due to geo-technical concerns (likely meaning concerns pertaining to the structural integrity of the mine wall), but as the west wall suffered a major collapse in early Q2 2016, the effort nevertheless seems to have been insufficient.

 ²¹ AKG 2015 MD&A, p.11 The intention to slow mine Nkran is apparent in the mine plans it reported at the end of 2015. Nkran's LoM was to be 12.5 years with the ores blended from the satellite pits and later with Esaase's.
 ²² Discussion with AKG's CFO



A pinch out at Nkran in 2017 could be a fatal blow. Nkran's high grade ore was to be mined slowly, producing cash for Esaase's development. According to AKG, Esaase requires at least \$100 million to \$110 million of capex to complete its 27-kilometer overland conveyor system and get Esaase's pit into production, plus another \$25 million to \$30 million to complete its expansion of the processing facility at Nkran that raises its milling capacity from 3.6 to 5.0 mtpa.²³

Pushing back the west wall involves removing approximately 37 million tons of waste rock at an estimated cost of \$75 million to \$115 million.^{24, 25} AKG has not provided clear guidance on the

²³ AKG, Technical Presentation, 2017-02-24, pp.30-31

²⁴ Within the 25 million tons of rock AKG projected 200,000 tons of ore.

²⁵ AKG's DPP production data only runs until 2018 so it doesn't capture all of the pushback required through what was initially termed "stage 4". An investor has asked the company for the estimated tonnage and cost to pushback the west wall but has to yet to receive it. We have used satellite images, company data, and the dimensions of the pit to calculate the tonnage to estimate the density of rock and cost of stripping. This methodology was approved by a geological firm. We have estimated a conservative and a base case scenario and taken a 20% haircut to our base case estimate to account for being unable to more precisely estimate the top end of the range.

Conservative assumptions – To access a significant part of the pit, AKG needs to pushback is at least 900 meters (length); the pit is currently around 200 meters in depth; we have also assumed AKG has to push the wall back at least 75 meters to sufficiently open the pit floor.

Base Case assumptions – To access a larger area of the pit, AKG needs to pushback 1,200 meters, the pit will be deeper by the time it pushes back (due to additional mining this and next quarter, 220 meters and we have also assumed AKG pushes the wall back 100 meters in order to maximize the ore it is able to access.

To calculate the volume of rock moved: Conservative - $900m \times 200m \times 75m = 13,500,000 \text{ m}^3$.

Base case - 1,200m x 220m x 100m = 26,400,000 m³. On p270 of the 2015 DRA we know the density rock at Nkran was 2.76 on average in the near surface so to calculate the tonnage we have: Conservative $-2.76 \times 13,500,000 = 37,260,000 \text{ m}^3$ and Base Case $-2.76 \times 26,400,000 = 72,864,000 \text{ m}^3$. To conservatively estimate mining cost we have used \$2 per ton which was the cost of mining during the pre-strip in 2015. This gives us a Conservative estimate of

exact size of the west wall pushback and did not provide a direct answer to the question when asked on the Q1 2017 conference call.²⁶ We believe the company was avoiding answering the question because it is unclear how much of the wall it can afford to remove. Because Nkran is still producing ore that is below the 2.03g/t reserve grades, we believe AKG might also be unsure how much additional ore it will access by pushing back the west wall.²⁷ If the pushback is significantly smaller than 37 million tons, it is highly likely AKG will be unable to access significant new parts of the ore body, and Nkran's LoM schedule will resultantly be cut short.²⁸

We estimate that if AKG decides to complete the pushbacks of the east or west walls needed to access new ore bodies, it will incur \$75 to \$115 million of stripping costs. However, with question marks hanging over the value of the ore at Nkran, management faces an unpleasant dilemma.

AKG's quandary is that it needs to pushback the west or east wall to avoid pinching out. This is essentially an additional pre-strip that AKG would need to do; however, doing so will require a substantial portion of its available cash. The initial pre-strip of 28 million tons took thirteen months to complete, our estimate is that these 37 million tons would require the equivalent of approximately one year of time and commensurate expense.

Nkran might have as few as two quarters of mining left

AKG's latest public statements lead us to believe that Nkran might be nearing the end of its economic life. If Nkran pinches out this soon, AKG appears that it will be unable to fund Esaase, which is the deposit with the greatest estimated total reserve ounces and the objective of Project 5 million. In the past month, AKG has made the following new disclosure on two occasions:

"166,000 ounces already pre-developed at Nkran, which don't require any further capital development to access"²⁹ – April 2017

"To-date, the in-pit development work that we have done at Nkran gives us access to ore inventory of 2.7 million tons containing approximately 166,000 ounces that is ready to be mined." 30 - May 2017

⁻ $2 \times 37,260,000 = 74.5$ million; and, a base case of - $2 \times 72,864,000 = 145.728$ million, which then haircut to arrive at \$115 million.

²⁶ AKG, Q1 2016, conference call

²⁷ AKG, 2017-02-24 Technical presentation p.24

²⁸ Strip mining requires that waste material above an ore body be removed and the walls set back in a series of terraced forms prior to being able to access the ore below.

²⁹ AKG, press release, 2017-04-27

³⁰ AKG, press release, 2017-05-04

We believe the above statements may be a warning to investors as 2.7 million tons of ore at a 2:1 strip ratio would give AKG as few as two remaining quarters of mining Nkran, even with rain hampering mining operations.³¹

Phase One as planned in the DPP was to incorporate the five deposits and have a Life of Mine (LoM) of 12.4 years, during which time Nkran was to supply 88% of the total ounces.³² If AKG is only able to remove an additional 166,000 ounces from the pit, it will have removed only 466,025 ounces (-79% compared to the November 2014 DPP).³³ If this becomes the case, LoM for Nkran will have been less than 36 months, about one quarter of the original plan, and seriously compromising Phase One.³⁴

Asanko MRE	Phase 1 Proven & Probable Reserves MRE Nov 2014 DPP (Unconstrained, Consultant CJM)							
Deposit	Tonnage (Mt)	Au Grade (g/t)	Moz					
Nkran	31.20	2.21	2.20	88%				
Adubiaso	1.80	2.07	0.11	4%				
Abore	2.10	1.77	0.11	4%				
Asuadai	0.50	1.26	0.02	1%				
Dynamite Hill	1.10	1.10 1.88 0.07 3%						
Total Obotan	36.70	2.22	2.51	100%				

The Satellite Deposits are Unlikely to Yield Significant Cash Flow

Most of the original satellite pits are no longer featured in the latest satellite deposit development plans (e.g., Adubiaso, Adubiaso Extension, the Nkran Extension). The demotions, which are likely due to poor underlying geology or significant pre-stripping costs demonstrate wide-ranging problems across the Obotan area.

Originally the neighboring pit Adubiaso was scheduled to be the first to follow Nkran into production with ~ 10 million tons being extracted in 2017.³⁵ It is featured in the 2015 LoM schedule presented below.

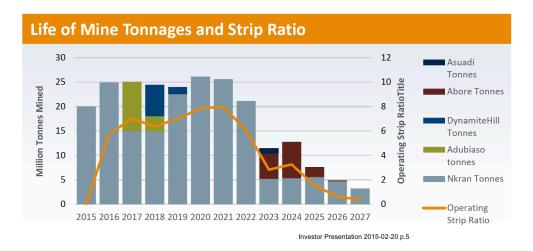
³¹ AKG, Q 1 2017 conference call. The company explained that it had a 2:1 strip ratio on the remaining 2.7 million tons of ore due to pre-development, this equates to less than nine million tons of mining. AKG mined six million tons in 1Q 2017 so we estimate around 1.5 quarters of mining remaining.

³² 2015-01-29 DDP p558 Nkran represents 87% of Phase One

 $^{^{33}}$ 221,025 (total ounces mined as of Q1 2017) + 166,000 + 79,000 (stockpile Q4 2016 is the larger of two numbers, some of these ounces should be in the inferred category and should not be depleted). 34 Based on recent mining rates which are predicted to remain unchanged. As reported the strip rate for these is 2:1

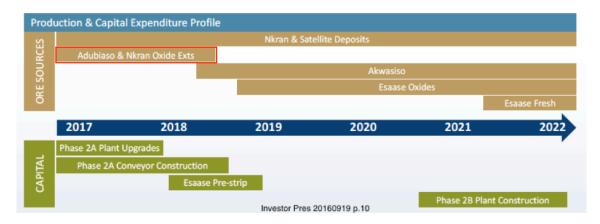
³⁴ Based on recent mining rates which are predicted to remain unchanged. As reported the strip rate for these is 2:1 (Q1 2017 conference call).

³⁵ AKG, Investor Presentation, BDO Conference, 2015-02-20, p.5



We estimate that Adubiaso would have required AKG to spend \$40 million removing waste rock before reaching the main ore body.³⁶ After mining Nkran for a full year and finding less gold (and producing less cash), the company appears to have been unable to afford Adubiaso's prestrip. In an apparent attempt to overcome this problem, AKG started to look for deposits with near surface mineralization. In February 2016, the company announced a new "Short-Term Strategy" targeting "near-mine, near surface deposits.³⁷ In practice this means that AKG was looking for ounces that didn't require it to spend much money to extract.

The production schedule continues to be constantly revised, with the development priorities being reshuffled each time. The September 2016 version is below and displayed the prominence of the Adubiaso and Nkran Extensions. Since September 2016, it has changed another four times, and Adubiaso Extension, and Nkran Extension were cycled out of the line up entirely.



Over the last year, the company's quest for near surface ore has involved changes to the announced satellite deposit development plans and sequencing on an almost bi-monthly basis.

³⁶ Based on 2014-01-09 Phase One DPP p426 fig16-40 & 16-41. Based on information provided in the DPP we calculate AKG would be required to remove 19.8Mt of rock to reach the main ore body at \$2 per ton which was the cost to move rock during the 2015 pre-strip of Nkran.

³⁷ 2016-02-26 presentation p9

The most recent change took place on May 23, 2017, when Dynamite Hill was postponed again and Akwasiso was advanced to the front of the schedule.

Delays and changes to AKG's satellite deposits and expansion plans

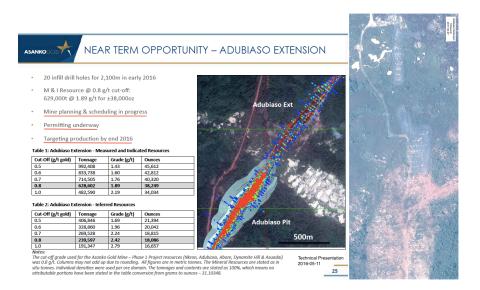
- February 2016 new Phase One mine plan "Short-Term Strategy" targeting Near-Mine, Near Surface Deposits. Abore, Asuadi and Esaase all dropped or scheduled for later in mine plan.
- May 2016 Adubiaso and Dynamite Hill will be in production at the end of FY 2016 and O1 2017 respectively.
- August 2016 Nkran extension and Adubiaso extension will be mined in Q1 2017. They were not previously part of the Phase One mine plan.
- September 2016 Akwasiso introduced into the mine plan, and planned for mining in 2H 2018.
- October 2016 Nkran extension will now be mined in 1H 2017 and the Adubiaso extension will be mined in 4Q 2016. The Nkran extension and the Adubiaso extension were both going to be mined in Q1 2017 previously.
- December 2016 Nkran extension and Adubiaso extension planned for later in revised LoM. They were previously scheduled for mining in H1 2017 and Q4 2016, respectively. Esaase has been delayed, and is now scheduled to begin producing ounces in 2H 2018, when it was previously supposed to come online in Q3 2017.
- March 2017 Dynamite Hill to commence mining in 2H 2017, having previously been scheduled for production in Q1 2017.
- April 2017 Dynamite Hill to be mined in O3 2017. Akwasiso now scheduled for mining in 2017, having previously been 2018. Esaase production delayed from 2018 until 2019.
- May 2017 Dynamite Hill mining delayed from H2 2017 until 2018.

The subsequent demotion of the Adubiaso and the Nkran extensions imply their expected economics are poor. Neither Adubiaso nor the Nkran Extensions remain featured in the latest satellite deposit development plans, even though these are two of the original satellite pits. Their ultimate demotion in the schedule contradicts May 2016 claims that these deposits were "early successes" 38

We theorize that the Adubiaso Extension no longer features in the mine plan because once AKG analyzed grade control drill results from Q3 2016, it realized the Extension likely did not contain significant amounts of gold.³⁹ In October 2016, AKG stated it would be mining the Adubiaso extension in 4Q 2016. However, Satellite analysis shows that after grade control drilling the Adubiaso extension in Q3 2016, little to no further activity took place on site. AKG seems to have quietly walked away.⁴⁰

³⁸ AKG, Investor Presentation, 2016-05-02, p.8, "Near-mine exploration delivering early wins" and "early successes on two near-mine priority targets." ³⁹ AKG, Investor Presentation, 2016-09-19, p.9

⁴⁰ By December 2016 the Adubiaso extension was pushed to later in the LOM.



The Nkran extension was also quietly dropped. The deposit was supposed to be mined in Q1 2017,⁴¹ then pushed to H1 2017,⁴² and later dropped from the mine plan.⁴³ AKG had reported these two extensions were fully permitted as of the end of 2016.⁴⁴

It is somewhat ironic that despite having four other major deposits in the area around Nkran, and having conducted extensive drilling to delineate extensions to two previously developed pits (Nkran and Adubiaso), AKG's current "best prospect" is not among this group.⁴⁵ Akwasiso is a satellite deposit newly acquired in Q3 2016, that AKG has fast-tracked and now resides at the forefront of its development plan.

We are skeptical about the potential of Dynamite Hill

AKG seems to have soured on developing Dynamite Hill. There are strong indications that prior models for the deposit were "smeared". Until very recently, Dynamite Hill had been scheduled to be the next satellite deposit scheduled for mining. On May 23, 2017, AKG abruptly announced that it will now be mined sometime in 2018. After reviewing an expert evaluation of

⁴¹ AKG, Press Release, 2016-08-08

⁴² AKG, Investor Presentation, 20161027, p.8

⁴³ AKG, Investor Presentation, 20161205, p.5

⁴⁴ AKG, 2016 AR MDA, p. 28 section on "Current Operations" reports that Adubiaso is permitted and ready, while the Annual Information states that it was already being mined. "The Company received the permit for the Adubiaso Extension in Q3 and completed initial grade control drilling in Q4 2016, progressing the deposit to be mine ready."2016 Annual Information, p. 49, "The Company received the permit for the Adubiaso Extension at the end of Q3 2016, completed initial grade control drilling and commenced mining in Q4 2016. The permit for the Nkran extension was received in Q4 2016 with mining expected to commence in Q1 2017." P. 54 "Mining operations are expected to begin immediately following the receipt of the permits."

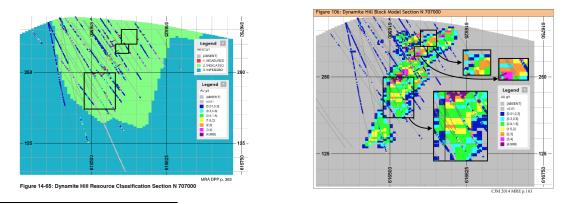
⁴⁵ The previous best prospects were Dynamite Hill, which itself was preceded by the Adubiaso and Nkran Extensions.

AKG's geologist reports, we suspect AKG sent this pit to the back of the line because it now believes the economics of mining it are less attractive than previously thought.⁴⁶

We believe that the most recent (February 2017) MRE contains flaws similar in scope and form to those of earlier Nkran estimates. There are indications the models have been smeared, which means to overweight positive results – extrapolating them out broadly – but underweight or ignore "zero intercepts." In the latest February 2017 MRE, CSA's new estimate for Dynamite Hill presented an 86% increase in its ounces (130,000 oz.).⁴⁷ As no technical report was released with the latest MRE, we reviewed data provided in the original 2014 MRE for Dynamite Hill.⁴⁸ This was carried out by CJM in 2014 and the DDP was based on this data. We believe this original estimate for Dynamite Hill likely contains data from the original MRE, which stated that:

"development of the Dynamite Hill model [drew] on the geological information gained through the development of the litho-structural models for the Nkran, Adubiaso, Asuadai and Abore deposits." ⁴⁹

Cross-section views of the Dynamite Hill block model generated by CJM MRE show highgrading blocks penetrated by drill holes whose gold interception data points were below the cutoff grade and at zero.⁵⁰ The image on the left is from the DPP and shows a section of Dynamite Hill depicting the limits of the indicated resources, the drill holes, and the values of the ore grades intercepted in the holes as the drilling penetrated the ore body. The image on the right is the section of Dynamite Hill and overlays the 3D block model on top of the drill holes and intercepts. The three ballooned sections provide a close-up view.⁵¹



⁴⁶ We reviewed an independent structural geology report that speculated a faulty understanding of the structural geology and inadequate modeling controls were major contributors to the problems with the resource estimates on the deposits at Obotan and Esaase, implying that Dynamite Hill will likely display similar issues.

 ⁴⁷ AKG, Technical Presentation, 2017-02-24, p. 23-24. The new estimate is 2.62 million tons of ore grading at 1.60 g/t and yielding 130,000 ounces.
 ⁴⁸ We reason that a substantial upgrade would need to build upon the previously established estimates. Had CSA

⁴⁸ We reason that a substantial upgrade would need to build upon the previously established estimates. Had CSA found problems, it would have been difficult to downgrade the resource and also nearly double its estimation of the gold it may contain.

⁴⁹ AKG, CJM 2014 MRE, p. 9 and 2015 DRA DDP, p. 571

⁵⁰ AKG, CJM 2014 MRE, pp.163-164

⁵¹ The color coding indicates different ore grades. Green is the cut-off grade. Yellow, orange, pink and purple represent incrementally higher grades. The blue is low grade ore and the lighter grey equals no ore (or "zero intercept", "null value").

The three ballooned sections are populated with large amounts of green, orange and pink, indicating that substantial amounts of ore at well above the cut-off grade should be present in these areas. These blocks are intersected by drill holes that contain continuous intercepts with long sections of "null values." This presents a simple contradiction. The drill data indicates there is no ore in the location with the null values, but the model indicates there is a continuous body of above cut-off grade ore in and all around the same place. The model appears to have been smeared: Set up to over-weight positive results - extrapolating them out broadly - but under-weight or ignore "zero intercepts."

There are clear indicia of sloppiness in the Dynamite Hill MRE and DPP that call the substance into question

Glaring typo-s in the publicly available 2014 MRE and 2015 DPP report sections documenting the statistical analysis at Dynamite Hill shows a surprising level of sloppiness, and call into question how diligently the work was performed. In the below statistical analysis we see that the inputs in the "Num records" (Number of records) column have also been pasted in the "Minimum g/t" column. This is not the only error. The numbers in the "minimum values" column exceed the numbers in the "maximum values" column and the "average values". In short, Dynamite Hill's entire statistical analysis table makes no sense. The erroneous data was later copy pasted from the MRE into the DPP. Given that the DPP report was prepared by DRA, a different mine consulting company from CJM Consulting, it is alarming that this wasn't caught.⁵²

.3.4 DYNA ble 37 sum	s.	CJM 2014	MRE p.146					
Min > Max								-
Table 37: Dynamite descriptive statistics for the various domains generated.								
Domain	Parameter	Num records	Minimum g/t	Maximum g/t	Average g/t	Variance	St Dev	CoV
GR	AU	1089	1089	0.005	107.28	1.94	22.69	4.76
PH4	AU	125	125	0.025	21.04	1.64	7.57	2.75
SNW	AU	464	464	0.03	44.40	1.45	8.24	2.87
SSE AU 288 288 0.005 13.95 1.42								1.93
			1					

15.3.5 ASAUDAI STATISTICAL ANALYSIS

Following domain generation descriptive statistics of the individual domains was (Table 38).,

Min < Max

Table 38: Asudai descriptive statistics for the various domains generated.								
Num Minimum Maximum Average Domain Parameter records g/t g/t Variance St Dev Co								CoV
ODO	AU	80	0.005	13.76	1.48	5.02	2.24	ODO
ODE	AU	80	0.005	1.93	0.16	0.08	0.29	ODE

⁵² AKG, CJM 2014 MRE, p. 146 and 2015 DRA DDP, p. 180. In the DRA Phase Two PFS this error was eventually corrected. P. 297

Dynamite Hill Statistical Analysis

Domain	Parameter	Num records	Minimum g/t	Maximum g/t	Average g/t	Variance	St Dev	CoV
GR	AU	1089	1089	0.005	107.28	1.94	22.69	4.76
PH4	AU	125	125	0.025	21.04	1.64	7.57	2.75
SNW	AU	464	464	0.03	44.40	1.45	8.24	2.87
SSE	AU	288	288	0.005	13.95	1.42	3.74	1.93
	DRA DPP p. 180							

Next mine up: Akwasiso

We see more signs of desperation when reviewing the acquisition of, drilling program for, and fast-track permitting of Akwasiso. Despite owning ~679 square kilometers of unexplored land, and five near-mine satellite deposits, the company opened negotiations on near-mine acquisition targets. By Q3 2016 it closed on the Akwasiso concession for \$8.6 million in cash and shares.^{53,54} The infill drilling (used to confirm the presence of mineralization) continued through April 2017.^{55,56} On May 23, 2017, ALTO advanced Akwasiso to the top of the satellite mine development plan, scheduling it for H2 2017.⁵⁷

AKG's sudden resumption of exploratory drilling in 2017 strikes us as a desperate attempt to hit a large high grade deposit that could potentially save the company (or at least distract the market from the serious problems at Nkran). In April, the company disclosed that a large portion of its exploration budget, which had grown approximately four times from last year, had already been used to drill out recently-acquired Akwasiso.^{58,59,60} The speed with which this new deposit accelerated through the ranks of AKG's satellite pit development plans, in our opinion, further underscores the company's desperation and the lack of potential of the other satellite deposits.

A skeptical interpretation is that the company accelerated Akwasiso's drilling so that it could first "bulk up" its December 2016 MRE and generate another upgrade (+26% to its reserve ore tonnage and grade, 65% to its ounces) just before release of its new LoM and multi-pit

⁵³ AKG, Technical Presentation, 20160511, p. 24

⁵⁴ AKG 2016 CFS, note 15e, p.30 and press release dated 2017-03-8, 2016-08-08. The deposit is not named in the CFS, but it approximately fits the 2016-08-08 press release description of the 3Q16 acquisition.

⁵⁵ AKG 2016 CFS, note 15e, p.30 and press release dated 2017-03-8, 2016-08-08. The deposit is not named in the CFS, but it approximately fits the 2016-08-08 press release description of the 3Q16 acquisition.

⁵⁶ AKG, Press Release, 2016-08-08: a total of 3,500m of diamond drilling had been completed by August 2016. AKG, Press Release, 2017-04-27: this increased to 5,147 by April of 2017.

⁵⁷ AKG, O1 2017 earnings call, 2017-05-04, 2017-05-23 press release.

⁵⁸ In 4Q 2016, AKG conducted large scale VTEM surveys which developed 20 new targets. In December of 2016, management unveiled plans to expand its exploration budget, engaging in ongoing exploration and evaluation of existing satellite deposits as well as "blind exploration" hoping for a Nkran "look-alike" discovery ⁵⁹ AKG, 2015 MDA, p. 5

⁶⁰ AKG, Investor Presentation, 20170404, p. 10

Akwasiso MRE Changes	Tons of Ore (MT)	Grade (g/t)	Ounces (Moz)
Akwasiso, Dec 2016 (CJM)	3.03	1.38	130,000
Akwasiso, April 2017 (CSA)	3.83	1.74	214,500
Increase	0.80	0.36	84500.00
% Increase	26.4%	26.1%	65.0%

Expansion Definitive Feasibility Study. This bit of positive news might have been viewed as taking investors' attention away from AKG's mounting problems.^{61,62}

Even as upgraded, Akwasiso still represents just 4.3% of the company's total "global" reserves.⁶³

AKG's QP Phil Bentley – about whom we have concerns due to his role at failed Great Basin Gold Ltd. – was responsible for the technical contents of Akwasiso's resource estimate; a new AKG QP, Mineral Resource Manager, Kathleen Hansmann, prepared the MRE; CSA Global's Malcom Titley "signed off".⁶⁴ However, as the same \$2,000 gold price pit shell cut off was applied again, we view the resource totals with a considerable degree of skepticism.⁶⁵

A different AKG QP, Frederick Fourie, was responsible for the reserve estimates. The cut-off grade for the reserves was raised from 0.5 g/t to 0.8 g/t. This seemingly conservative change might give investors greater confidence in the modelled results; however, the same thing happened with the 2014 MRE for Nkran, which later turned out to be too optimistic.⁶⁶

Despite including Akwasiso in the December 2016 MRE and subsequent upgrade in April 2017, AKG has provided little technical information about the deposit. AKG's recent press releases repeat that "minimal pre-strip or development work" is needed to access incremental ounces from oxides.⁶⁷ In the March 8, 2017, press release AKG selectively presents drill data from 2017, as well as two cross sections featuring in bold what we suspect are three of the most

⁶¹ AKG, Q1 2017, conference call, 2017-05-04. The percent or total expenditure from the company's \$13million exploration budget used to expedite drilling at Akwasiso was not provided.

⁶² AKG, press release, 2017-04-27, The upgrade provided a total of 3.83 million tons of ore vs. 3.03 million tons previously reported (+26.4%), at 1.74 g/t vs. 1.38 g/t (+26.1%), and a total estimate of 214,500 ounces vs. 130,000 oz (+65.0%). The resources also experienced a huge 79% boost, now totaling 6.72 million tons, while resource grades were improved by 24% from 1.20 to 1.49 g/t, yielding an estimated 322,500 ounces.
⁶³ See Graph and table entitled at "AKG Proven and Probable Reserves, April 2017 Update", 214,500 oz out of

⁶³ See Graph and table entitled at "AKG Proven and Probable Reserves, April 2017 Update", 214,500 oz out of 4,880,00 total.

⁶⁴ AKG, press release, 2017-04-27. Of note, the original data included in the December 2016 MRE for Akwasiso was generated by CJM and "signed off" by Phil Bentley. The technical data CSA Global is now using to justify upgrading this prior CJM MRE assessment is not presented.

⁶⁵ AKG, press release, 2017-04-27.

⁶⁶ As was actually done with both Nkran and Esaase in the past. As can be seen from the Nkran December 2016 MRE downgrade, even with a subsequent reduction in grade back down to 0.5 g/t, substantial over-estimates remain when other improper constraining parameters are originally selected.

⁶⁷ AKG, press releases dated: 2017-03-08, 2017-04-27, 2017-05-23

promising intercepts.⁶⁸ This seems to not conform with NI 43-101 practices.^{69,70} Therefore, the degree to which the deposit can deliver low-cost, near-surface ounces in the oxides for an extended period, whether it will rapidly transition from scooping out oxides to mining ore from the hard granite, or is likely to be another "nuggety" or "erratic" deposit, is not possible to assess.^{71,72,73}

With our doubts about the geology of Akwasiso, it is valid to ask what portion of the 430,000 ounces already lost from Nkran in the Dec 2016 downgrade can actually be made up by Akwasiso. More importantly though, if Nkran fails either due to a mine-closing wall collapse or simply pinches out, and over 1.2 million ounces are lost, neither Akwasiso, Dynamite Hill, nor the two combined meaningfully narrow the resource gap AKG will need to bridge.⁷⁴

Flawed MRE Analyses are at the Root of AKG's Problems

The root of the problem for the company has been, and remains, overly optimistic Mineral Resource Estimates (MREs).⁷⁵ A December 2016 MRE decreased the estimated gold contained in Nkran and Esaase by \$581 million. While this MRE seems to bring expectations more in line with reality, we have reason to believe the new Nkran estimate is still flawed. Reported Q1 2017 grades at Nkran fell 11% short of the stated reserve grades in the new MRE, and Q2 2017 is projected to be similar into mid-June.⁷⁶ Nkran's measured resources have shrunk dramatically (-

⁶⁸ AKG, press release, 2017-03-08. The March release gave some drilling data and two cross sections, but no view of the block models.

⁶⁹ AKG presents the positive results, but promising to release details on the mining rate, grades, pre-strip in technical reports to be released at a later date.

⁷⁰Under NI 43-101 guidelines, exploration results must not be disclosed selectively, and selective bolding of best results should be avoided. The best practice is to post all drilling and assay results on the company website. See Mining Disclosure: NI 43-101 fundamentals, best practices, and useful guidance for TSX and TSX, Dated 2015-03-04 Venture issuers

⁷¹ AKG, press release, 2017-04-27, and others. Multiple press releases note Akwasiso's geology is similar to Nkran's and other satellite deposits and that ore is in "an intrusive granite which hosts a shallow dipping quartz veining".

⁷² AKG, press release, 2017-04-27, The data table presented in the March 8, 2017 press release shows just 28 drill hole results with an average of 1.89 g/t, but a median of just 1.1 g/t, suggesting a nugget deposit is possible. The nearby satellite pit Adubiaso was described as "erratic" when mined.

⁷³ The April 27, 2017 press release contained a note indicating changes to the MRE methodology, utilization of oriented cores, improved definition of the grade shells using physical wire-framing and ordinary kriging (OK) estimation, which should all help improve their modelling. If modelled in such a way as to consider the complex geology, constrain the ore body, prevent smearing, properly weight "zero intercepts", and limit other excessive over-extrapolation problems that appear present in past model, investors should have a better idea of what is in the ground.

ground. ⁷⁴ 1.47 million ounces listed in Nkran's constrained and depleted December 2016 MRE – Q1 total of 58,187 ounces depleted plus the 166,000 ozs reported as easily accessible = > 1.2 million ounces. Not only will these satellite deposits incur direct mining costs, but also come with logistical, scheduling, and management costs and challenges.

⁷⁵ Mineral Resource Estimates are prepared by QP's and split the mineralized ore body into three classifications: Inferred (lowest level of confidence), Indicated (reasonable level of confidence) and measured (high degree of confidence of grade, tonnage, shape, densities, physical characteristics and mineral content).

⁷⁶ AKG, Q1 2017 conference call, Peter Breese replied to a question about how grades were just 1.8 g/t for Q1 2017 and when grades would should be expected to achieve the updated reserved grade levels, "I guess, so just the mine grades, we expect and it was part of the budget, we expect the mine grades to stay at around about those levels for about another six weeks from now. And then we'll return those to the Life of Mine plan, which is roughly 2 grams a ton."

22.6%), while growth of indicated and inferred make up some of the difference. The cutoff grades for Nkran and Esaase were lowered dramatically, which also raises eyebrows.

Alarmingly, the same MRE increased the value of satellite deposits using a highly questionable assumed gold price of \$2,000/Oz., which is way out of line with AKG's peers. AKG has not yet released a technical report that would shed light on the reasonableness of the upgrades to the satellite pits – investors should demand AKG do so immediately.

Nkran does not contain the gold AKG and investors expected

By the end of 2016, it was already clear that AKG's aggressive mining failed to reach high grading ores or deliver the quantity of ounces predicted. It succeeded only in removing more material and depleting even more ore from the "guts" of the deposit.

The mine plan provided from 2015 contains data on the intended ore grade to be mined by year. The first two years of mining were to deliver rich ore at average mined grades of 2.44 g/t in 2015, 2.15 g/t in 2016, and 2016 feed grades reaching 2.58 g/t.⁷⁷ However, AKG reported no ore for 2015, and mined grades never exceeded 2.0 g/t in any quarter in 2016.⁷⁸ Feed grades from the three quarters of 2016's commercial production were also disappointingly low, reported at just 1.7, 2.1, and 2.1 g/t, 18.3% less than the 2.58 g/t average feed grade predicted.⁷⁹

 ⁷⁷ AKG, Technical Presentation, 2015-02-10
 ⁷⁸ AKG, Q4 2016, earnings presentation, p. 5

⁷⁹ AKG, Q4 2016, earnings press release

The table below shows the significant gold deficit versus plan (-10.7%), despite having mined 18.9% more ore than planned. AKG was to have mined <u>44.9 million tons</u> of material from which 3.9 million tons of ore would yield <u>187.4 thousand ounces</u> of gold.^{80,81} However, at the end of 2016 over <u>51.0 million tons</u> of material were mined, depleting 4.7 million tons of ore, and yielding just <u>162,838 thousand ounces</u>.⁸²

Gold 2015 & 20	016 Reported	Production vs. 2015	Life of Mine ((LoM) Plan
2015	LoM	2015 (FY Reported)	Difference	Difference (%)
Ore Mined ('000 t)	230	-	(230)	-100.0%
Waste ('000 t)	19,761	22,700	2,939	14.9%
Total Material ('000 t)	19,991	22,700	2,709	13.6%
Gold (oz.)	-	-	-	0.0%
2016	LoM	2016 (FY Reported)	Total	Difference (%)
Ore Mined ('000 t)	3,704	4,676	972	26.2%
Waste ('000 t)	21,254	17,750	(3,504)	-16.5%
Total Material ('000 t)	24,958	22,426	(2,532)	-10.1%
Gold (oz.)	182,428	162,838	(19,590)	-10.7%
2015 & 2016	LoM	2016 (FY Reported)	Total	Difference (%)
Ore Mined ('000 t)	3,934	4,676	742	+18.9%
Gold (oz.)	182,428	162,838	(19,590)	-10.7%

Source: Compiled from AKG reports and presentations

The 2016 figures reveal aspects of AKG's aggressive mining. Not only was 26.2% more ore extracted without delivering the gold, but it also removed 16.5% less waste material. This might seem like a good thing, but if AKG continues to mine Nkran, that material will need to be moved.

⁸⁰ Per the AGM Mine Plan presented in the in its 2015 MDA, p.11. 230kt + 3,704 = 3,934 thousand tons of ore for '15 & '16. 19,761kt + 21,254kt ('15 & '16 waste) + 3,934kt ('15 & 16' ore) = 44,949 millions tons of total material.

⁸¹ According to AKG's 2015 DPP, in the 25th month after AKG commenced mining at Nkran, mining would start at Adubiaso. AKG started mining Nkran in Feb 2015, so the 25th month corresponds to March 2107.

⁸² AKG Q1 2016 MD&A p. 12, 2015 MDA p.11, Technical Presentation 2016-05-11 p. 31, Q4 2016 Earnings Presentation, p.5. In 2015 and 2016 only Nkran was planned to be mined. None of the other Obotan pits were to enter the mine plan until 2017.

The December 2016 MRE seems to true up Nkran geology flaws, but still raises questions

CSA Global generated constrained and depleted MREs for Nkran and Dynamite Hill as of December 31, 2016.⁸³⁸⁴ CSA Global also performed a review of Esaase, but did not rerun its MRE. AKG's December 2016 MRE is the combined product of two different consultants using CSA Global's results for Nkran and Dynamite Hill but CJM Consulting's results for the rest.

The table below presents the differing results for Nkran between the new/updated CSA Global results for Nkran's MRE from those generated by CJM, which produced the prior 2014 MRE. Nkran lost -3.05 million tons of ore, had -12.1% cut from its grades, and erased 430,000 ounces. The net effect was to downgrade Nkran's value by approximately \$490 million.⁸⁵, ⁸⁶

Nkran Dec 2016 Proven & Probable Reserves Dec 2016 MRE CJM Constrained and Depleted vs. CSA Updated Results							
Consultant	Tonnage (Mt)	Au Grade (g/t)	M oz.				
Updated Dec 2016 MRE by CSA Global (Constrained & Depleted)	25.58	2.31	1.90				
Dec 2016 MRE by CSA (Constrained & Depleted)	22.53	2.03	1.47				
Difference	-3.05	-0.28	-0.43				
Difference (%)	-11.9%	-12.1%	-22.6%				

Source: AKG, Feb 2017 Technical Presentation

Even with CSA's lower reserve grades of 2.03 g/t, AKG is falling short. In Q1 2017, reported grades for the quarter were only 1.8 g/t, or -11% below the stated reserve grades. Q2 2017 was predicted to be similar through at least mid-June.⁸⁷ The recently disclosed remaining 2.7 million tons of ore that AKG is readily available to mine is forecast to produce grades of just 1.91 g/t.⁸⁸

The February 2017 technical presentation provides additional insight. In the image below, a cross-section of the Nkran pit is shown. The image contrasts the prior CJM constrained and depleted MRE with the newly revised CSA Global constrained and depleted MRE.⁸⁹ The purpose of the illustration is to show changes to the measured, indicated, and inferred

⁸³ For information on internal questions about grades, see the Technical Presentation dated 2016-05-11, "Early Mining Challenges" pp. 30 which notes that "Since Q3 2015 mining consistently reported variances in ore tonnage and grade relaDve to DPP plan - more tons - lower grades". Additional information can be seen in the background notes pertaining to CSA Global being called in, in the 2017-02-24 Technical Presentation.

 ⁸⁴ CSA Global, consultant for the job is Malcom Titley.
 ⁸⁵ AKG, Press Release, "AKG Gold Updated Resource and Reserve Statement", 2017-02-24

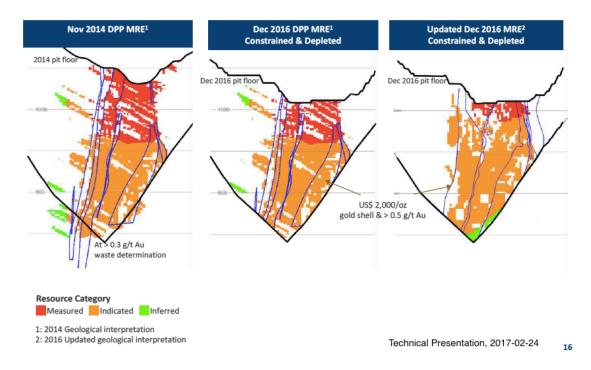
⁸⁶ Value calculation range is based on a 95% recovery rate and a \$1200/oz selling price.

⁸⁷ AKG, Q1 2017 conference call "The grade was marginally lower than the previous quarter as we were mining through a planned lower grade section of the ore body which is also planned to continue in the second quarter of 2017."

⁸⁸ AKG Q1 2017 conference call 166,000 ounces from 2,700,000 tons equates to 1.91g/t

⁸⁹ AKG, Technical Presentation, 2017-02-24.

Resources.^{90,91} The Measured Resources are shown in red, and Indicated are in orange. Despite a 37.5% reduction in the cut-off grade, the Measured have clearly and dramatically shrunk exactly below the area where mining and grade control drilling has been focused.



Perhaps most surprising is that the downgrade to Nkran occurred despite a 37.5% reduction (from 0.8 g/t to 0.5 g/t) to the cut-off grade for its Resources at its deposit.⁹² Esaase likewise experienced losses despite a 16.7% reduction (from 0.6 g/t to 0.5 g/t).⁹³ The reduction in the cutoff grade reduces the hurdle rate for assessing whether an ore body's estimated gold content is sufficiently high to be classified as a resource. All other things being equal, the relaxation of a critical constraining parameter should allow more ore and more ounces to enter the model. This was the case for all the other satellite pits. However, at Nkran and Esaase, the two largest and most important deposits, the reduction of the cut-off grade was not able to offset the reduction in

⁹⁰ A Measured Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics are so well established that they can be estimated with confidence sufficient to allow the appropriate application of technical and economic parameters to support production planning and evaluation of the economic viability of the deposit. The estimate is based on detailed and reliable exploration and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes that are spaced closely enough for geological and grade continuity to be reasonably assumed. An Indicated Mineral Resource is that part of a Mineral Resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters to support mine planning and evaluation of the economic viability of the deposit. (the remainder of the definition of indicated matches that for measured.)

⁹¹ The difference between the Measured and Indicated is the degree of confidence that the findings are well established and supported by detailed and reliable data, properly drilled, collected, and tested. ⁹² Management's casual categorization of the two cut off grades 0.8 g/t to 0.5 g/t with a 37.5% difference as being

[&]quot;very similar" numbers is also rather questionable.

⁹³ AKG, Annual Information, p. 36, different cut-off grades were used to estimate the Obotan and Esaase pits.

ore and ounces. Had the cutoff grade been left unchanged; the loss of ore and ounces would have likely been considerably greater.

The justification for significantly reducing the cut off grades was that production inputs in the Whittle parameter, including lower mining and processing costs, process plant throughputs, and gold recovery rates had all improved.^{94,95} We believe this may be optimistic. Over the last three quarters the company's operating costs, as measured by its AISC, are trending 14% - 22% above the estimates generated in the Phase One DPP and were projected to rise in 2017.⁹⁶ Furthermore, per the Phase Two PFS, as AKG progressed into Phase Two, its AISC was expected to increase slightly.⁹⁷

Record gold price assumption helps AKG reassure investors

Because Nkran is expected to fund the Phase Two(a) / Project 5 Million expansion plan and developing Esaase, the resource downgrade would seem to be a crippling blow. Even worse, Esaase Main also lost 2.9% of its reserves. Although small in percentage terms, it amounts to a loss of ~80,000 reserve ounces, or a \$91 million decline in the value.⁹⁸ CEO Breese's statement below provides the likely reason AKG's stock has not yet cratered in the wake of the Nkran and Esaase downgrades:

"Our global gold reserves have remained largely unchanged at 5 million ounces, supported by the successful 2016 near mine exploration program which added over 300,000 low cost ounces to the mineral inventory, offsetting mining depletion. We are very excited by the exploration potential that the AGM complex holds and anticipate adding more ounces to our resource base during 2017 from a considerable list of near mine high priority targets."⁹⁹

The \$581 million downgrade of Nkran and Esaase was largely offset by upgrades to satellite pits that relied in part on increasing the assumed gold price to 2,000 / oz, which is way out of line with AKG's peers. The table below present the impact of the changes to the reserve estimates by deposit.

⁹⁴ AKG Technical Presentation, 2017-02-24. p. 22

⁹⁵ Whittle Pits are a modelling tool used to delineate and define the shape and form of the mine to be constructed and then assist in selecting an optimal size for the pit itself to maximize the economic return from the investment in mining. Whittle Parameters are the constraints applied to the pit model. These may include a wide range of economic, operational factors, including: the market price of the commodity, operational costs, selling costs, discount rate, recovery rates (from processing), dilution rates (from mining/processing) as well as geological and geotechnical considerations, etc. Transparency into these parameters was limited. As we found numerous instances where we believe that the company would present only positive information and withhold other findings showing "bumps and warts", and their reported mining costs coming in well above estimates used for the initial DPP cost models, we find their reduced overall cost projections that allow a lower cut-off grade to be questionable.

⁹⁶ All-in Sustaining Costs (AISC) are a non-GAAP metric developed by the World Gold Council and used in the mining industry for measuring costs.

⁹⁷ AKG, Phase Two PFS, DRA, 2015-06-29, p. 566. AISC for Phase One and Phase Two were projected to be \$781 and \$798 (+2.2%). Average cash operating costs were to be \$645 and \$670 (+3.8%).

⁹⁸ Value calculation range is based on a 95% recovery rate and a \$1200/oz selling price.

⁹⁹ AKG, Press Release, 2017-02-24

Dec 2	Dec 2016 MRE (Constrained and Depleted) CJM Consulting vs. Updated Results based on CSA Global								
Deposit	Change in Tonnage (millions of tons)	Change in Tonnage %	Change in Au Grade (g/t)	Change in Au Grade %	Change in Qty of Au Millions of oz.	Change in Qty of Au %			
Nkran	-3.05	-11.9%	-0.28	-12.1%	-0.43	-22.6%			
Nkran - Ext	0.50		1.88		0.03				
Adubiaso	0.39	21.7%	0.14	7.4%	0.03	27.3%			
Adubiaso - Ext	0.22		1.98		0.01				
Abore	1.02	48.6%	0.03	1.8%	0.06	54.5%			
Akwasiso	3.03		1.38		0.13				
Asuadai	0.58	116.0%	-0.01	-0.8%	0.02	100.0%			
Dynamite Hill	1.52	138.2%	-0.38	-19.2%	0.06	85.7%			
Total Obotan	4.21	13.5%	-0.32	-14.5%	-0.09	-4.1%			
Esaase - Main	-0.91	-1.5%	-0.02	-1.4%	-0.08	-2.9%			
Esaase - B	0.13		0.85		0.00				
Esaase - D	0.62		1.50		0.03				
Total Esaase	-0.16	-0.3%	-0.02	-1.4%	-0.05	-1.8%			
Net Changes	4.05	4.4%	-0.11	-6.5%	-0.14	-2.8%			

The net impact was -2.8%, -140,000 oz. equating to a loss of \$160 million of reserve ounces in the ground.¹⁰⁰ Moreover, AKG also will now have to mine out an additional 4.05 million tons of ore that will likely require 16 million tons of waste, an additional estimated cost of \$50 million and still extract less gold than planned under its prior MRE.¹⁰¹

¹⁰⁰ Value calculation range is based on a 95% recovery rate and a \$1200/oz selling price.
¹⁰¹ The company has not yet provided the strip ratios for each pit, but even at a low 4:1 ratios, this would require over 16 million tons of waste. This totals to 20.3 million tons of material. At the reference mining cost used in Esaase's PSF (p. 403) of just \$2.59/t which is much lower than Nkran's current \$3.89/t, the mining cost to get back to "no material change to global reserves" it likely to be over \$50 million.

The table below presents the gains and losses by deposit for both Measured and Indicated (M&I) Resources and Proven and Probable (P&P) Reserves. By adding new satellite deposits and increasing the resource and reserve estimates at all the original deposits, the total estimated gold ounces loss of -490,000 oz. from resources and -510,000 oz. from reserves is nearly offset by an addition of 420,000 oz. to resources and 370,000 oz. to reserves.

December 2016 Updated MRE Gains and Losses of Resources and Reserves by Deposit								
Gains and Los	ses of Reso	ources and R	eserves by L	peposit				
	Updated M	&I Resources	Updated P&P	Reserves				
Deposit	Gain	Gain Loss		Loss				
Nkran		-0.15		-0.43				
Nkran - Ext	0.02		0.03					
Adubiaso	0.00		0.03					
Adubiaso - Ext	0.03		0.01					
Abore	0.00		0.06					
Akwasiso	0.18		0.13					
Asuadai	0.00		0.02					
Dynamite Hill	0.02		0.06					
Total Obotan	0.25	-0.15	0.34	-0.43				
Esaase - Main		-0.34		-0.08				
Esaase - B	0.08							
Esaase - D	0.09		0.03					
Total Esaase	0.17	-0.34	0.03	-0.08				
Sub-Total	0.42	-0.49	0.37	-0.51				
Net Impact	-1	0.07	-0.14	4				

AKG stated that it adopted the new MRE "to be prudent...[and] elected to use the more conservative."¹⁰² However, the new "conservative" measured, indicated, and inferred mineral resources uses a \$2,000/oz. gold price to define the gold pit shell. This is now included as a "constraint" based because the prior MRE's Measured and Indicated category contained no such limitation or parameter at all. As a \$2,000/oz. price is ~60% higher than recent market prices and one which has NEVER been attained.¹⁰³ Comparable mining companies appear to be ultraconservative:

Gold Prices Used in Annual Resource Estimates As of Dec 31 2016 (USD)		
Company	Constraining Gold Price	
Centerra Gold (TSX:CG):	\$1,300 ~ \$1,455 \$1,200 ~ \$1,500 \$1,200 \$1,400	
IAMGOLD (TSX:IMG):		
Kirkland Lake (TSX:KL)		
Silver Standard (TSX:SSO)		
Sulliden Mining (TSX:SMC)	\$1,500	
Primero Mining Corp (TSX:P)	\$1,200	
Asanko Gold (TSX:AKG)	\$2,000	

Source: Company Filings

AKG updated its MRE, but failed to provide a new technical report

Despite significant changes to the company's MRE, AKG did not release a new technical report. Without a technical report, investors are unable to assess the suitability or accuracy of the inputs that define and control the zones of mineralization in the new CSA block models.¹⁰⁴ This suggests significant resource and reserve over-estimates might still plague Nkran. This is also likely the case for all other satellite pits, which have MREs based on the original and, in our opinion, potentially flawed models.

AKG's justification for not releasing a new technical report after the major December 2016 downgrade to Nkran is that there was "no material change to the global reserve inventory". We disagree that this justifies withholding the report. In the revised MRE, Nkran and Esaase lost a combined 490,000 reserve ounces while the satellite deposits added 370,000 ounces.¹⁰⁵ The composition of its six original deposits were significantly revised and five new deposits were added. Investors should note that CJM performed most of the revisions to the original deposits and reviews of the new deposits, which is the same firm that provided the original MREs for the other Obotan satellite pits and Esaase. Investors should demand AKG release not just the technical reports for all 11 deposits, but include their individual 3-D block models, complete drill data sets, and a complete reconciliation of production back to the original CJM block model.

¹⁰² AKG, press release, 2017-02-24

¹⁰³ In August 2011, Gold briefly crossed \$ 1900/oz in a brief bubble before retreating to levels closer to the current market price. <u>http://money.cnn.com/2011/08/22/markets/gold_prices/</u>

¹⁰⁴ AKG, press release, 2017-02-24

¹⁰⁵ AKG, press release, 2017-02-24 Due to the new ounces brought into the MRE from Adubiaso, the Adubiaso and Nkran Extensions, Abore, Asuadai, and Dynamite Hill, no net change was affected.

AKG's Looming Liquidity Crisis

AKG is at very high risk for a liquidity crisis in 2018. When factoring in the seemingly binary possible Nkran outcomes of either an expensive west wall pushback or pinchout, we expect the company to run out of cash in 12 - 18 months. The company's liquidity is limited to only \$48 million of cash on hand as of Q1 2017, and it has no availability on its \$150 million revolver with Red Kite. We adjusted the company's Source and Uses table for 2017 below, using the company's assumptions (although we believe its assumptions are aggressive).

The company adds in receivables to its cash on hand, which we see as aggressive because receivables are not always liquid and the full amount might not be collected. However, we used the company-favorable \$66 million cash number for the beginning 2017. For 2017, we used management's guidance, despite having proven unreliable, and added Phase One of the wall pushback costs.

If the cost for the west wall pushback is in the mid to upper end of our estimates, the company could experience tightening of liquidity in 2017 with problems manifesting in 2018. We estimate that excess liquidity carried into 2018 could range from \$24 million -\$8 million, assuming a \$1,200 gold spot price.¹⁰⁶ These assumptions do not include lower production, higher potential costs, or capex increases.

¹⁰⁶ AKG assumes \$1,200 / Oz in many of its slides.

MW Sources & Uses Table	High End	Low End
Assumptions		
Gold Price Assumption / Oz	\$1,200	\$1,200
Production (ounces)	240,000	230,000
2017E Revenues (\$ millions)	\$288	\$276
AISC \$/Oz	\$880	\$920
Total Costs (\$ millions)	\$211	\$212
AISC Margin (\$ millions)	\$77	\$64

2017 Guidance (\$m) @ \$1,200/oz Au	High End	Low End
Sources		
Cash on hand bullion and receivables	66	66
AISC Margin	77	64
VAT recovery	15	15
Total Sources	158	145
Uses		
Expansion Capex (Project 5M plant upgrades)	27	27
Expansion Capex (Project 5M conveyor)	45	45
Growth Exploration	13	13
Wall Pushback	38	58
Interest on RK debt	11	11
Total Uses	134	154
Excess liquidity carried to 2018	24	(8)

Company's 2017 Guidance and Sources and Uses Table Below:

2017 GUIDANCE

- Production guidance reiterated for 2017
 - 230,000 to 240,000 ounces
- Cost guidance updated for 2017
 > AISC \$880 \$920 / ounce
- Gold price assumption
 - ≻ \$1,200/oz



High End	Low End
66	66
77	64
15	15
158	145
27	27
45	45
13	13
11	11
96	96
62	49
	66 77 15 158 27 45 13 11

• Project 5M increases 2018 production to +270,000oz & lowers AISC

 2018 expansion capex of +/-\$63m (less than 2017) funded from cash resources and cash generated from operations

10

When we carry the AKG's excess liquidity into 2018, and include the company's amortization of the loan and second phase of the wall pushback, we project the company has a cash shortfall ranging from -\$43 million to -\$129 million.

Assumptions for 2018 Sources and Uses Case:

• Production Assumption: Production of 176,156 ounces on the high end and 111,364 ounces on the low end. Reserve of Mine (RoM) stockpile plus the Marginal Ore stockpile as reported in the February 24, 2017 press release. In the low-end production assumption, we discounted the RoM Stockpile by 12% per the December 2016 downgrade to reserve grades at Nkran.

2018	High End	Low End
Nkran ROM	75,790	66,695
Nkran Oxides	7,500	-
Akwasiso	65,820	35,011
Dynamite Hill	18,157	9,658
Nkran Extension	8,889	-
Total Production		
(ounces)	176,156	111,364

• AISC Assumption: We assume AISC drops to \$777/oz, which is substantially lower than their 2017 guidance and where the company have been averaging. We arrive at this number by lowering operating cash costs and royalties by 25% from 4Q16, which was the lowest quarterly reported AISC in the last four quarters. According to management,

one reason the AISC is lower is because the company will be mining from the oxides in the satellite deposits which are lower cost.

- VAT Recovery remains the same in 2018 at \$15 million.
- Total Capex of \$63 million in High End and \$70 million in low end: The capex planned for Project 5 million is to be \$100 to \$110 million for the mine and overland conveyor project and \$25 to 30 million for upgrading the processing facility. Total \$125 million to \$140 million of capex. A total of \$72 million of capex was planned for 2017 and \$63 million for the remainder in 2018 for a total of \$135 million.
- Wall Pushback Phase 2: We estimate the total cost for the wall pushback to be in the \$76 million to \$116 million and take place in 2H 2017 and 1H 2018 in order to keep the mine operational. For 2018, the wall pushback costs range from \$38 million to \$58 million.
- Principal Payment for Loan: The loan payment to Red Kite occurs on July 1, 2018, October 1, 2018 and January 1, 2019 at about \$15 million per quarterly payment (or \$45 million in 2018), not accounting for accrued interest. This loan payment will be ongoing for a total of ten equal payments. Interest on the loan is about \$11 million per year.

Assumptions	High End	Low End
•	8	
Gold Price Assumption / Oz	1,200	1,200
Production (ounces)	176,156	111,364
2018E Revenues (\$ millions)	211	134
AISC \$/Oz	777	777
Total Costs (\$ millions)	137	87
	157	07
AISC Margin (\$ millions)	75	47

2018 Assumptions (\$m) @ \$1,200/oz Au	High End	Low End	
Sources			
Cash on hand bullion and receivables	24	(8)	
AISC Margin	75	47	
VAT recovery	15	15	
Total Sources	114	54	
Uses			
Total Capex	63	70	
	20	50	

Total Capex	63	//0
Wall Pushback	38	58
Principal on RK debt	45	45
Interest on RK debt	11	11
Total Uses	157	184
Cash shortfall in 2018	(43)	(129)

MW Sources & Uses Table Carried over to 2018

If AKG determines that the wall pushback comes at too great a cost and the economics of further developing Nkran are no longer attractive (which we suspect may be the case), it might decide to stop mining the deposit. In this scenario, it might find that only a very light pushback around the pit might be sufficient to stabilize the mine long enough to extract the remaining 166,000 pre-developed ounces it has identified below the pit floor.¹⁰⁷ A lower cost pushback would conserve some cash and sustain liquidity, but entail walking away from the company's most highly valued asset. We see the secondary effects of that being a significant loss of confidence from shareholders, negatively impacting the stock price, and shutting off even the remote possibility of a substantially dilutive equity raise.

Red Kite Loan

Red Kite, the company's sole lender, has already amended AKG's credit agreement multiple times. The most recent was during Q2 2016, when the revolver was amended to defer repayment of principal for two years. There was a 2% penalty on the loan (\$3.275 million) and the revised interest rate of 10.5% on the \$17 million accreted portion of the loan is a significant increase from the LIBOR + 6% being paid on the balance.¹⁰⁸ Investors should be wary of any additional dilution from further pushing back the debt repayment. In December of 2015 – before AKG's problems were nearly as apparent as they are now – the company issued Red Kite warrants for four million shares ($\sim 2\%$ of fully diluted shares then outstanding) in exchange for waiving the 3% drawdown fee.¹⁰⁹ Now the revolver is fully drawn, and the company continues to burn cash. We question whether the company will be able to pay its first \$16.5 million installment due July 1, 2018. AKG is obligated to make additional \$16.5 million payments every three months thereafter.

AKG's cash flow forecasts should be given no credence

The company continuously guides for positive free cash flow, however it has consistently missed. For example, for 2016 AKG guided for \$74 million in "post-tax cash flow", but ended up burning free cash of -\$114.1 million.¹¹⁰ For 2017, the company is guiding to \$89 million in post-tax cash flow, however we expect free cash flow to be effectively breakeven at best. Below is a slide in from the December 7, 2015 investor presentation in which the company expected 2016 post tax cash flow in the \$74 million to \$89 million range assuming \$1,200/Oz. The company ended up with negative -\$77.4 million of free cash flow in 2016.

¹⁰⁷ AKG, press release, April 27, 2017

¹⁰⁸ AKG, MD&A Q2 2016

¹⁰⁹ AKG, MD&A, 2015-12-31 p26

¹¹⁰ Source: S&P Capital IQ levered FCF; unlevered FCF per S&P Capital IQ was (\$105.7 million).

			LOWEST QUARTILE LOM AISC OF US\$781/oz
price environment	protection in	weak goid	Corporate G&A US\$35 * Cash cost: US\$645
Phase 1 generates strong ca weak gold prices	sh flow, even	with	Financing costs US\$17 • On-site AISC: US\$725 Sustaining capex US\$19 • Total AISC: US\$781
Soft start to debt amortizati of US\$8m due July 1, 2016	on with first p	ayment	Royatties USS65 Refining USS4
Expect commercial producti positive in Q2 2016	ion and cash f	low	Mine G&A Mining US\$83 US\$348
			Process US\$209
Phase 1 Key Metrics*	2016	2017	CUMULATIVE CASH FLOWS - PHASE 1*
Production (oz)	187,537	202,348	1,000
Cash cost (US\$/oz)	598	634	800
AISC (US\$/oz)	748	786	200 000 000 000 000 000 000 000 000 000
Post-tax CF (US\$m)			0 55 millions
@US\$1,100/oz	57	81	200
		00	100
@US\$1,200/oz	74	89	• • • • • • • • • • • • • • • • • • •

Note that the company was guiding for AISC in the \$748 to \$786/Oz range in these slides above.¹¹¹ However, the company missed its AISC by a wide margin and attained \$893/Oz in AISC Q4 2016, but has since increased to \$956/Oz in Q1 2017.¹¹²

Below is another overly optimistic projection the company made in November of 2014, forecasting 2017 free cash flow to be in the \$100 million to \$143 million range.

Robust economics at spot Economics at US\$1,300/o Low cost foundational ass Flexible debt financing has	z gold (pit design ba et that can generati	usis) very stro e cash flow di	ng and improved over 20 uring all parts of the cycle	12 DFS
Gold Price	NPV 5% (US\$m)	IRR (%)	2017 After-Tax Free Cash Flow (US\$m)	Year 1 – 4 Average After-Tax Free Cash Flow (US\$m)
Spot - US\$1,150/oz	253	20	103	80
Study Basis - US\$1,300/oz	412	26	120	100
		35		

¹¹¹ All-in Sustaining Costs (AISC) are a non-GAAP metric developed by the World Gold Council and used in the mining industry for measuring costs. AKG's AISC is calculated as: Total Cash Costs (Operating Cash Costs + Royalties) + Corporate Costs + Sustaining Capex + Deferred Stripping Costs + Reclamation Cost Acceleration. For more information see "EY, All-in sustaining costs and all-in costs", Americas Mining & Metals Forum, September 2013. AISC includes operational stripping costs, Corporate G&A (including share-based comp), amortized reclamation and remediation costs (for operating sites), (sustaining) exploration and study costs, Capitalized stripping (sustaining) costs, (sustaining) capex."

¹¹² Note the AISC in the \$748 to \$786/oz range in the November 2014 presentation. According to the company, AISC attained a low of \$893/oz in Q4 2016, but has since increased to \$956/oz in Q1 2017. AKG, Q4 2016 and FY2016 earnings presentation, p. 7 and AKG, Q1 2017, earnings presentation, p. 6.

Everything is NOT Ok, Management is Not Conservative

Investors seem to give AKG management more credit than we think it deserves. We have noted two instances in which management has stated material facts that are simply untrue, and are in complete opposition to prior disclosures AKG has made. It is deeply disturbing that AKG has delayed releasing its block model reconciliation for over a year, giving reasons that we do not see as valid. On the surface, Peter Breese and Colin Steyn have a solid track record of exiting resource investments, but there are countervailing facts of which investors should be aware. Finally, Breese and Steyn have taken significant money off the table, which we believe is a sign of lost faith in the company.

AKG cannot seem to get its story straight on relocating the village at Nkran

Management's statements regarding the Nkran Village Relocation Plan (RAP) are contradictory. AKG originally stated the RAP was completed in September of 2015, which would have been on time per the original plan. Six months later, AKG suddenly stated the relocation never happened. With this admission, AKG had a reason to delay the pre-strip on the east wall. Another possible explanation for why AKG delayed the pre-strip is that it realized the grades in the pit weren't reconciling with the model, and instead wanted to direct mining resources to find the ore with better grades.

In February 2015, AKG projected the RAP would be complete by September 2015.¹¹³



¹¹³ See p24 of <u>https://www.AKG.com/assets/docs/2015-02-04_AKGCP.pdf</u> for the original partial relocation action plan (RAP).

In December 2015, management reported the RAP was completed in September 2015 (ontime).¹¹⁴

Securing Our Social License: Partial Village Relocation

- 88 households relocated on time in Sept 2015
- New settlement includes electricity, street lighting, potable water & integrated sewerage
- Built by the community for the community
- Setting a new standard for resettlement in Ghana: reinforcing our social license to operate
- US\$9m spent



Memory Hole:¹¹⁵ In May 2016, AKG presented an alternative version of events that directly contradicts the earlier information.¹¹⁶



- 22.7Mt of waste moved in 2015 ahead on West side, but behind on East
- East behind due to timing of Nkran partial village relocation and therefore limited blasting
- 1.18Mt more than plan due to Western wall pushback geotech concerns

Our investigators visited Nkran village and learned that although a village moving ceremony had taken place in September 2015, the work had not been completed, and many villagers remained at the site past that date. Ironically, this reportedly didn't stop AKG from blasting, and damaging some villagers' houses. Reports also indicate that ongoing blasting is also damaging their replacement houses, and at least some villagers expect they will need to be relocated once again.

The revised historical timeline is repeated on the Q3 2016 conference call. This time then-CFO Greg McCunn uses the "delayed village" as an excuse for failing to provide the market with a mine reconciliation and other issues (emphasis added):¹¹⁷

¹¹⁴ AKG Investor Presentation, 2015-12-07, p.6 "88 households relocated on 7me in Sept 2015" and "RAP: Completed Sept 2015"

¹¹⁵ "A memory hole is any mechanism for the alteration or disappearance of inconvenient or embarrassing documents, photographs, transcripts, or other records, such as from a website or other archive, particularly as part of an attempt to give the impression that something never happened.^{[1][2]} The concept was first popularized by George Orwell's dystopian novel Nineteen Eighty-Four, where the Party's Ministry of Truth systematically re-created all potential historical documents, in effect, re-writing all of history to match the often-changing state propaganda. These changes were complete." https://en.wikipedia.org/wiki/Memory hole

¹¹⁶ AKG Technical Presentation, 2016-05-11, p. 14 & p. 31

¹¹⁷ AKG 3Q16 Conference call, p.16

"Dan, the block model reconciliation is obviously a moving part, because we have to look at different areas of the pit that are being mined, because some areas of pits are lower than where we said it's going to be. And some areas of the pit are higher than where we said it would be. For instance, the western center part of pits is about 10 or 12 meters lower than it was meant to be and the eastern center of the pit is 45 meter higher than where it was meant to be. Going back to the original feasibility study. The very specific reason for that is which is unbeknownst to some people is because we have to do the relocation of the village and that was delayed."

In this instance, AKG appears to be using the village move delay as cover for several operational changes: holding off on the east wall pushback, going deeper in the western center of the pit, and even an inability to reconcile its block model.

Pre-stripping uncovers another memory hole

AKG almost certainly incurred far more pre-stripping cost than planned. Pre-strip is the waste material that must be removed to access reserve grade ore. AKG's Phase One DPP and mining plans from early 2015 called for a pre-strip at Nkran of between 18 million to 21.6 million tons.

Rather than make clear the original plan underestimated the amount of pre-stripping, AKG retroactively changed the original plan without making the change apparent to investors – it was as though the company hoped nobody would notice the difference.¹¹⁹ According to AKG's own numbers, the final pre-strip total was over 28 million tons, which exceeded the high-end estimate of the originally planned total of 21.6 million tons by over 29%.^{120,121} This equates to ~5.4 million tons or over \$12.8 million in excess cost.¹²² AKG ignored these facts in April 2016 (emphasis added):

"the pushback ... is advancing well, with a total of 28 million tons mined since mining operations commenced early in 2015 against a plan of 26.2 million tons."¹²³

AKG's spin increased in July 2016, claiming to be ahead of schedule and within budget:

"This is a remarkable achievement to get to steady state production levels within a sixmonth period considering the fact that not only did we build the mine ahead of the plan and

¹¹⁸ AKG Gold Mine – Phase One Definitive Project Plan (DPP), DRA Projects, 2015-01-26, pp. 37, 425. Note: The text on pg. 425 of the DPP shows the pre-strip at 18Mt and 11 mos. The charts on Pg. 426 converts to about 21.6 Mt.

¹¹⁹ Along the way, management also changed its view on the importance of the pre-strip to the achievement of mine performance targets and impact on the budget. ¹²⁰ AKG, 2Q16 Conference Call, July 20, 2016

¹²¹ AKG Gold Mine – Phase One Definitive Project Plan (DPP), DRA Projects, 2015-01-26, pp. 37, 425. Note: The text on pg. 425 of the DPP shows the pre-strip at 18Mt and 11 mos. The charts on Pg. 426 converts to about 21.6 Mt.

¹²² The cost of mining during the pre-strip was \$2 per ton, therefore 6.4Mt would have cost c\$12.8 million.

¹²³ AKG. Press Release, Asanko Gold Announces Commercial Production and Provides Operational Update, 2016-04-06

within budget, but at the same time and like the majority of new mine projects, we had to pre-strip well over 28 million tons from the historically operated Resolute pit¹²⁴

AKG creates opacity by delaying release of its block model reconciliation for over one year

Beginning in July 2016, AKG began providing dubious reasons for delaying releasing a full reconciliation of its original block model. The essence of ore grade reconciliation is to assess actual production versus the model.¹²⁵ We suspect that reconciliation back to the original Nkran block model will demonstrate that flawed geology underpins the original Nkran MRE. Management has offered the following reasons for not releasing the reconciliation (emphasis added):

"We will anticipate that this <u>reconciliation will take another six months of mining</u> in the main mineral domain to be able to clearly reconcile our mineral resource to grade control and our reserve estimate to plan feeds."¹²⁶ – July 2016

"We started to open up and now are getting into that main sandstones on to mineralization and the first month that we were mining that reconciliation was awful. And reason for that is you had a big high wall on the side of that and is was [indiscernible]. But that now is moving towards the east more and more and its opening up nice and widely just like we predicated and I'm sure that that reconciliation will improve and <u>that's why we said to the market is we will give the market update and those reconciliations next Jan</u>." – November 2016

"Due to the complexity in planning a schedule for 11 different pits and the detailed design process, we now anticipate publishing the expansion feasibility study in Q2 2017."¹²⁷ - February 2017

We do not take these explanations at face value. In our view, the company has had all the data it needs to perform the reconciliations. Satellite photos and drone footage show that grade control drilling has been ongoing in the pit. Our investigator interviewed 21 mine employees who confirmed that company's trucks are equipped with GPS. The location of each load of ore and wastes origin from the pit and its delivery point in the stockpile has been collected.¹²⁸ Nevertheless, the reconciliation has been delayed for over 12 months.

AKG has now set a date of June 5th for the updated PFS presentation. The company has indicated that any new reconciliations may be presented based on a new, revised block model.

¹²⁴ AKG, 2Q16 Conference Call, July 20, 2016

¹²⁵ Variance can arise from any differences in any of the inputs. A consistent record of poor reconciliation is an indication that this variance has not been adequately managed, or is originating from a factor (such as low ore grade) which cannot be improved - Amoako Richard, Al-Hassan Sulemana. Ore Grade Reconciliation Techniques – A Review. *Journal of Geosciences and Geomatics*. Vol. 3, No. 5, 2015, pp 116-121.

http://pubs.sciepub.com/jgg/3/5/1

¹²⁶ AKG, 2Q16 Earnings Call Transcript, 2060720

¹²⁷ AKG, Press Release, 2017-02-24

¹²⁸ Since the trucks were equipped with GPS, traceability of the loads from the mine into the stockpiles would be easily maintained, greatly facilitating and expediting reconciliation efforts.

Using a different block model for the reconciliation can be analogous to comparing apples to oranges. Investors should hold management accountable and demand a reconciliation to the original block model.

Senior management's track record is less impressive than investors seem to realize

To date, we believe the only reason investors stuck with AKG is because of the seemingly stellar reputations of Chairman Collin Steyn and CEO Peter Breese. Analysis of the LionOre and Mantra transactions suggests management sold assets to undisciplined buyers during a bull market, and that the aftermaths were punishing to the buyers.

Lion ore

Numerous red flags came to light after the sale of LionOre in 2007. Peter Breese and Colin Steyn received a windfall on LionOre, selling the asset for \$6.4 billion to Norilisk at the top tick of a bull market in Nickel.¹²⁹ The premium price paid for LionOre was partially justified by Activox, a "proprietary technology." Within 12 months of the acquisition, Norilisk wrote down \$490 million on the Activox technology, and over the next four years, the entire ascribed fair value of \$706 million was written off.^{130,131} Norilisk was forced write down an additional \$1.09 billion on the Tati Nickel asset purchased as part of the LionOre transaction. The previous management (current management of AKG) seems to have substantially underestimated project costs in the feasibility study.¹³²

Colin Steyn's Highland Park was an investor in Coalspur in April 2010.¹³³ He was appointed Chairman in September 2011 alongside the appointment of Peter Breese who was appointed a non-executive director.¹³⁴ After failing to gain timely approval for the Vista coal project the company struggled to raise equity financing and was acquired by K.C. Euroholdings for \$0.02 a share in 2015, with investors suffering a 98% loss since IPO.¹³⁵

Mirabela Nickel, where Colin Steyn was appointed as a non-executive director did not fare much better. After disruption to its main supply contract with Brazilian metals producer, Votorantim

¹²⁹ <u>http://www.ft.com/cms/s/0/9081af0c-26a6-11dc-8e18-</u>

⁰⁰⁰b5df10621.html?ft site=falcon&desktop=true#axzz4i96J2UHf

¹³⁰ Norilisk 2011 AR p212

¹³¹ Norilisk 2007 AR p285

 ¹³² Norilisk 2007 AR p285 "Subsequent to acquisition of LionOre, an extensive feasibility review of the Activox Refinery Project at Tati Nickel, a subsidiary of LionOre, was conducted by management of the Group and an independent third party. *The review highlighted a substantial project cost escalation from the feasibility study conducted by the previous owners*. Based on these facts and circumstances management of the Group made a decision to postpone the project indefinitely. *As a result, as at 31 December 2007 mineral rights presented within mining assets and goodwill recognized on acquisition of LionOre were impaired in the amounts of USD 765 million and USD 325 million, respectively* ¹³³ https://www.abnnewswire.net/press/en/62663/Coalspur-Mines-Limited-(ASX-CPL)-Placement-To-Strategic-

¹³³ <u>https://www.abnnewswire.net/press/en/62663/Coalspur-Mines-Limited-(ASX-CPL)-Placement-To-Strategic-Investor-To-Raise-A\$30M-62663.html</u>

¹³⁴ http://www.newswire.ca/news-releases/coalspur-appoints-new-chairman-and-director-508722471.html

¹³⁵ http://business.financialpost.com/news/mining/pdac-2015-canadian-coal-exports-poised-to-jump-after-takeoverof-long-suffering-coalspur

Metais, in September 2013, the shares lost 97% of their value and remained suspended at \$0.01 when Mr. Steyn resigned his position in January 2014.¹³⁶

Breese and Steyn have taken significant money off the table

Peter Breese and Colin Steyn have sold a substantial portion of their original holdings in AKG. The major sales of stock are likely to have occurred during 2015 via offshore share sales. In the Annual Information form filed with SEDAR we find the following disclosure:

"Common shares owned by Highland Park SA are controlled indirectly by Mr. Steyn but will be distributed by Highland Park to the beneficial owners in 2015."¹³⁷

In the year after this disclosure is filled we see Breese and Steyn's combined position reduced from 8,524,423 shares to no more than 4,310,789 shares.¹³⁸ Coincidentally at the same time the shares were distributed, AKG stopped breaking out the number of shares held by individuals and instead began grouping the entire management team's holding.

¹³⁶ http://www.afr.com/business/mirabela-nickel-chairman-resigns-in-reshuffle-20140113-iya8d

¹³⁷ AKG, Annual information form, 2015-03-16 p54

¹³⁸ AKG, Annual information form 2016-03-06 shows the entire management team own 4,310,789 shares