



GEMFIELDS

Market Update

Quarter ending 31 December 2013

(unaudited)

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GEMFIELDS plc

Kagem Emerald Mine
(Zambia)
75%

Mbuva-Chibolele
Emerald Mine (Zambia)
100% (care & maintenance)

Kamakanga Emerald
Mine (Zambia)
100% (care & maintenance)

Kariba Amethyst Mine
(Zambia)
50%

15 Madagascar
Exploration Licenses
(rubies, sapphires and
emeralds)

Zambian Emerald
Exploration Licenses

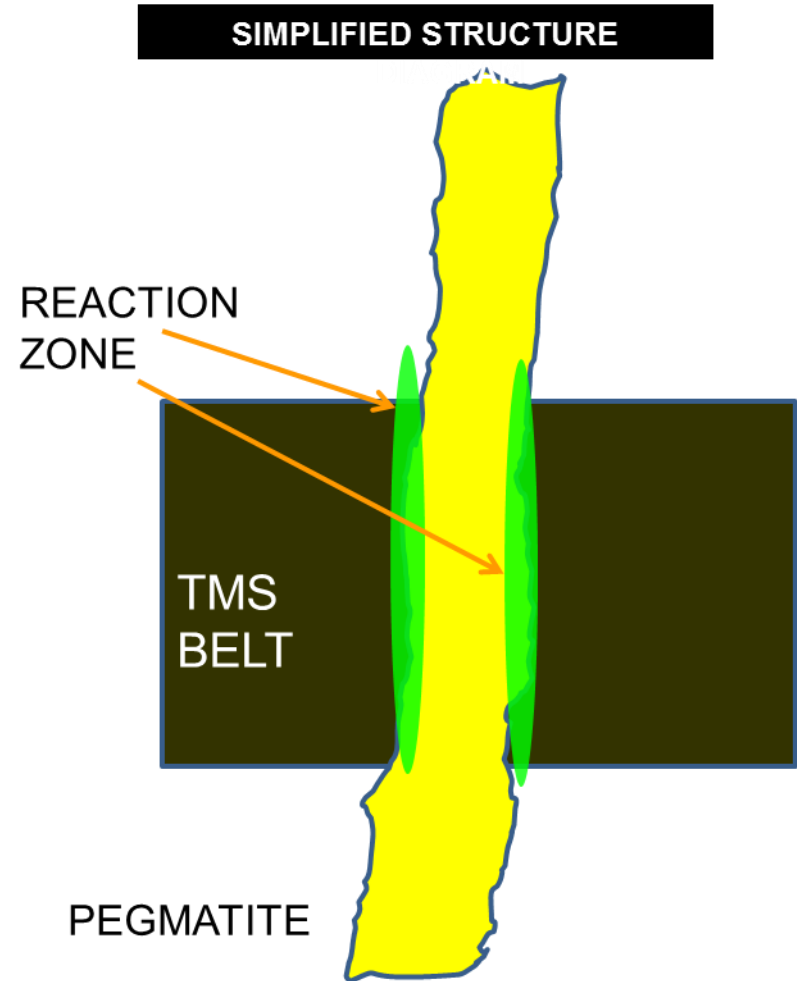
Montepuez Ruby Mine
(Mozambique)
75%

Faberge Limited
100%

Equity Stake in Richland
Resources (formerly
TanzaniteOne Ltd)
10%

Emerald and Beryl Geology - The Basics

1. Emerald ore, known as Reaction Zone (“RZ”), is created when a pegmatite cuts through a layer or belt of talc-magnetite-schist (“TMS”).
2. A complex reaction between the pegmatite and the TMS results in a layer of RZ of varying thickness and quality. This reaction gives rise to emerald and beryl crystals.
3. RZ contains emeralds and beryl. Both TMS and pegmatite are essentially devoid of emeralds and beryl.
4. TMS belts are typically 10-40 metres thick.
5. Pegmatites vary from a few centimetres to tens of metres thick.



Kagem Quarterly Production to 31 December 2013

KAGEM Quarterly Summary to Dec-13	Units	Mar-11	Jun-11	Sep-11	Dec-11	Mar-12	Jun-12	Sep-12	Dec-12	Mar-13	Jun-13	Sep-13	Dec-13	TOTAL
PRODUCTION														
Gemstone Production (Emerald+Beryl)	million carats	3.5	10.8	4.9	3.9	4.9	7.3	7.9	6.6	6.5	8.9	6.5	3.9	75.7
Ore Production (Reaction Zone)	'000 tonnes	12.0	21.7	24.0	17.5	20.8	40.7	30.5	23.1	24.5	27.8	21.4	17.2	281.1
Grade (Emerald+Beryl/Reaction Zone)	carats/tonne	290	500	205	222	236	181	259	288	265	322	302	224	269
Waste Mined (including TMS)	million tonnes	0.8	1.4	2.2	2.2	1.6	2.7	2.6	2.2	2.2	2.5	1.9	1.9	24.2
Total Rock Handling	million tonnes	0.8	1.4	2.2	2.2	1.6	2.8	2.6	2.2	2.3	2.5	1.9	2.0	24.5
Stripping Ratio		66	66	91	124	77	67	84	96	91	89	88	113	86
CASH COSTS														
Kagem Total (Cash) Operating Cost	USD million	3.6	3.5	7.2	7.0	6.0	9.8	8.5	7.7	6.9	9.0	6.8	6.8	82.9
Implied Operating Profit/(Loss)	USD million	0.1	7.4	2.6	0.8	3.8	4.8	7.3	5.6	6.1	8.9	6.1	0.9	54.1
Gemstone Unit Cost (E+B)	USD/carats	1.0	0.3	1.5	1.8	1.2	1.3	1.1	1.2	1.1	1.0	1.1	1.8	1.1
RZ Unit Cost	USD/RZ tonne	298	160	301	400	291	242	280	333	282	325	319	393	295
Rock Handling Unit Cost	USD/tonne	4.4	2.4	3.3	3.2	3.7	3.5	3.3	3.4	3.1	3.6	3.6	3.5	3.4
ACCOUNTING COSTS														
Kagem Operating Cost *	USD million			3.9	3.4	4.2	4.2	4.0	4.4	3.6	4.4	4.3	4.5	40.8
Implied Operating Profit/(Loss) *	USD million			6.0	4.4	5.7	10.5	11.8	8.9	9.4	13.4	8.7	3.2	81.9
Gemstone Unit Cost (E+B) *	USD/carats			0.8	0.9	0.8	0.6	0.5	0.7	0.6	0.5	0.7	1.2	0.5
RZ Unit Cost *	USD/RZ tonne			162	193	200	104	130	189	147	160	199	261	145
Rock Handling Unit Cost *	USD/tonne			1.8	1.5	2.6	1.5	1.5	2.0	1.6	1.8	2.2	2.3	1.7

1. In the final quarter of the financial year Kagem recorded gemstone production of 3.9 million carats. Ore grade during the quarter decreased to 224 carats per tonne with unit gemstone production costs increased to USD 1.17 per carat (and USD 1.76 per carat on a cash cost basis, i.e. including capitalised waste mining costs).
2. Given their “pockety” nature, it is not unusual for coloured gemstone deposits to display significant and periodic grade and production variation. Kagem’s cumulative grade since January 2005 is approximately 310 carats per tonne.
3. Kagem’s unaudited total cash operating costs for the twelve quarters ending 31 December 2013 totalled USD 82.9 million, implying an average production cost during that period of USD 1.10 per carat of emerald and beryl.

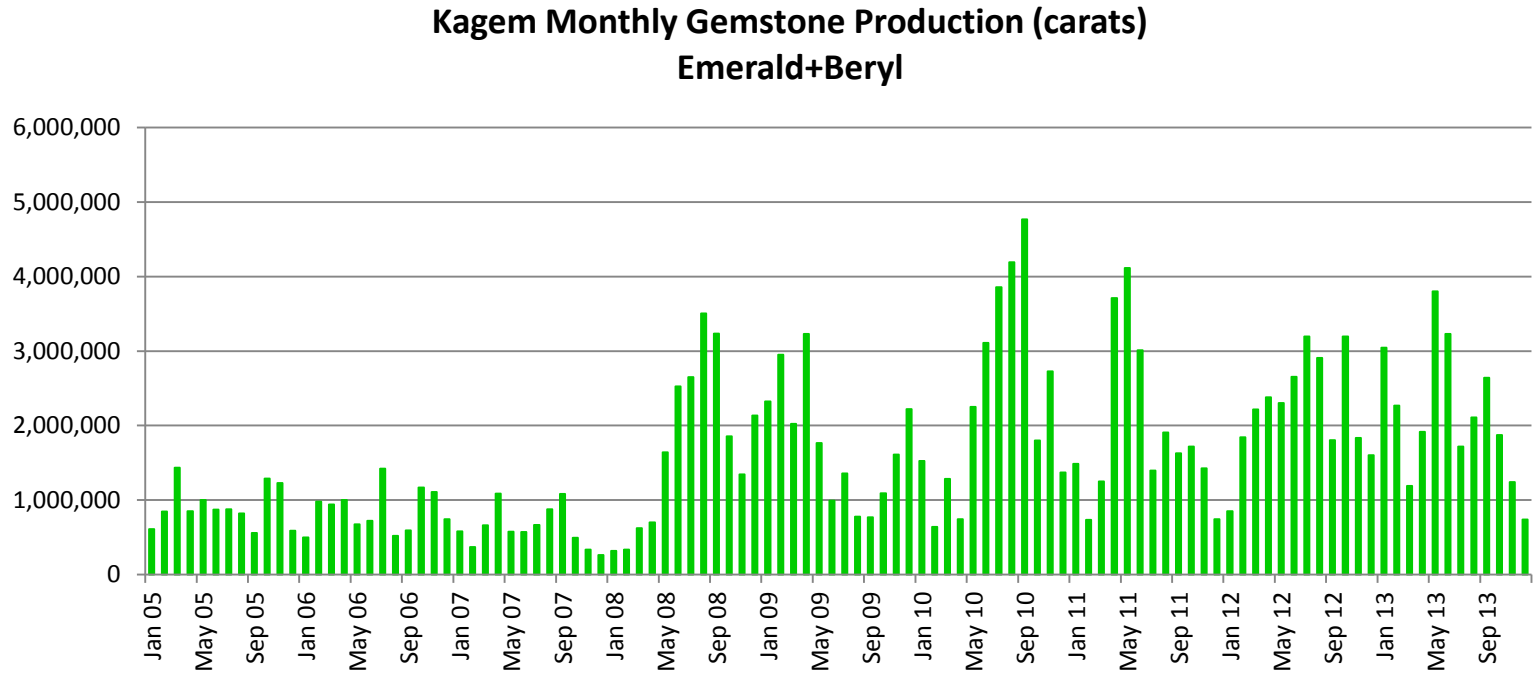
* With effect from July 2011, Gemfields adopted a new accounting policy whereby all waste moving costs are capitalised and are then subsequently amortised when the corresponding ore in that area is mined (in keeping with the accounting principle of “matching costs to revenues”). Therefore, the following measures are, **only with effect from July 2011**, reported **excluding** the cash costs of waste removal incurred in that month: monthly operating costs (USD million), Unit gemstone production costs (USD/carats), Unit ore production costs (USD per tonne of ore).

Kagem Annual Summary

Kagem Annual Production Summary	Units	YEAR to 30 Jun 2006	YEAR to 30 Jun 2007	YEAR to 30 Jun 2008	YEAR to 30 Jun 2009	YEAR to 30 Jun 2010	YEAR to 30 Jun 2011	YEAR to 30 Jun 2012	YEAR to 30 Jun 2013
Gemstone Production (Emerald+Beryl)	million carats	10.2	9.4	9.9	28	17.4	33.0	21.1	30.0
Ore Production (Reaction Zone)	000 tonnes	22	29	42	80	61	69	103	106
Grade (Emerald+Beryl/Reaction Zone)	carats/tonne	462	325	233	349	286	478	205	283
Waste Mined (incl. TMS)	million tonnes	1.8	2.8	5.1	4.0	2.5	3.9	8.7	9.5
Waste+ TMS: Reaction Zone	stripping ratio	83	96	120	50	42	57	84	90
Total Rock Handling	million tonnes	1.8	2.8	5.1	4.1	2.6	4.0	8.8	9.6

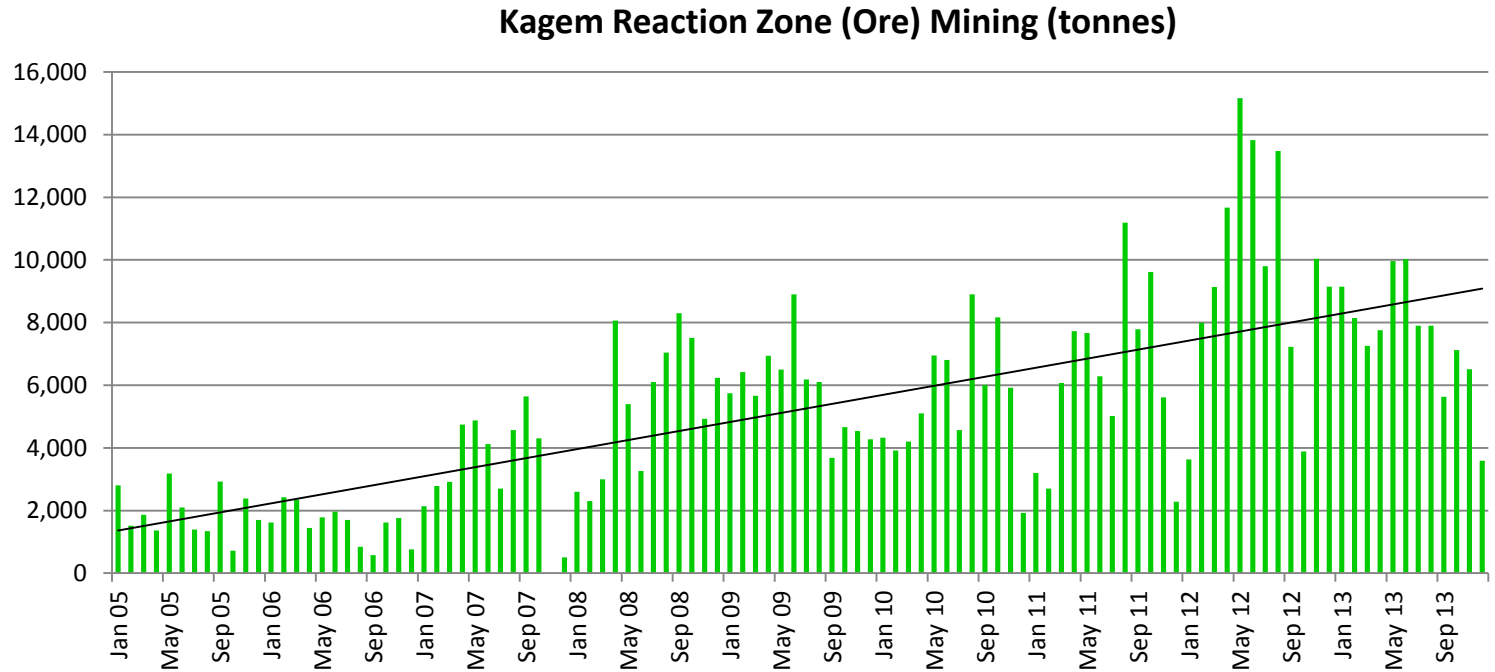
1. Gemfields was contracted to manage Kagem in November 2007. Gemfields then acquired 75% of Kagem in June 2008. The remaining 25% is owned by the Government of the Republic of Zambia.
2. Kagem recorded gemstone production of 30.0 million carats in the year ending 30 June 2013.
3. Grade during the period ending 30 June 2013 stood at 283 carats per tonne, versus 205 carats per tonne in the year ending 30 June 2012.

Kagem Monthly Gemstone Production



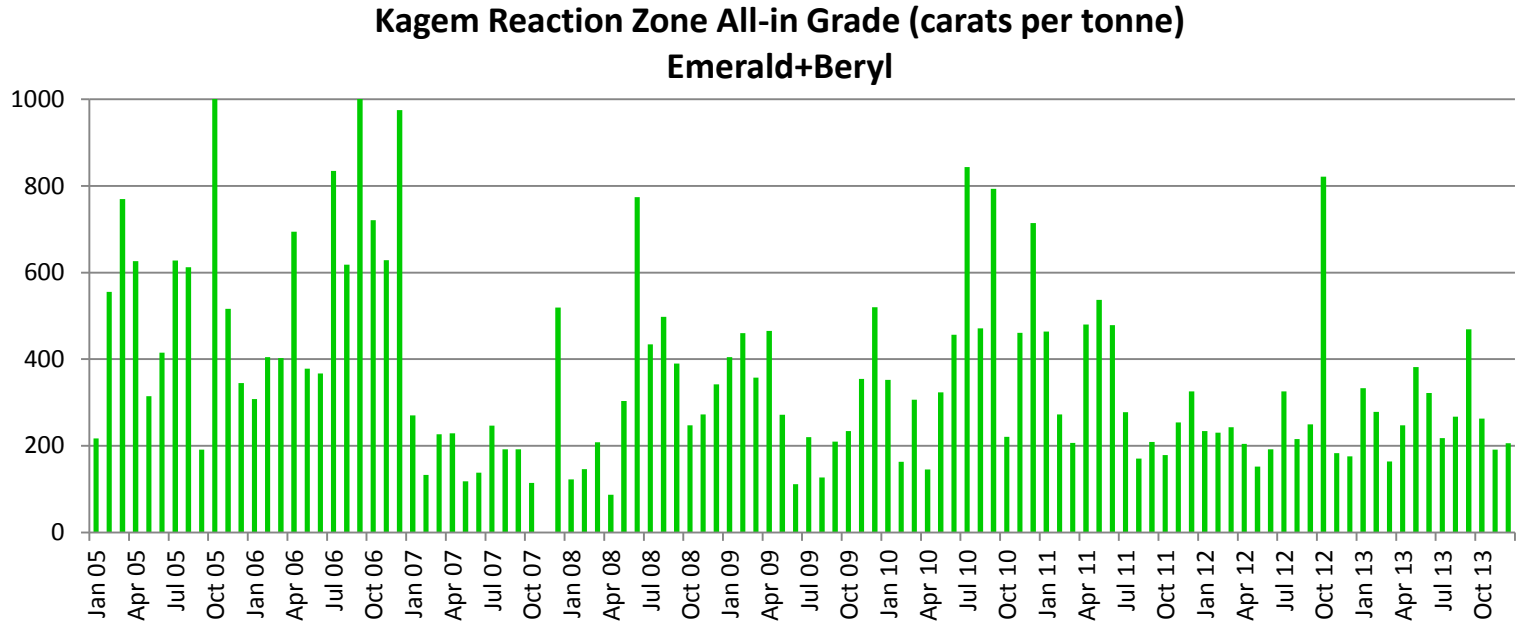
1. During Gemfields' period of ownership (which commenced June 2008), gemstone production has averaged 2.1 million carats per month.
2. Average monthly gemstone production in the quarter ending 31 December 2013 was 1.3 million carats (versus 2.2 million carats per month in the quarter ending 30 September 2013).

Kagem Monthly Ore Mining



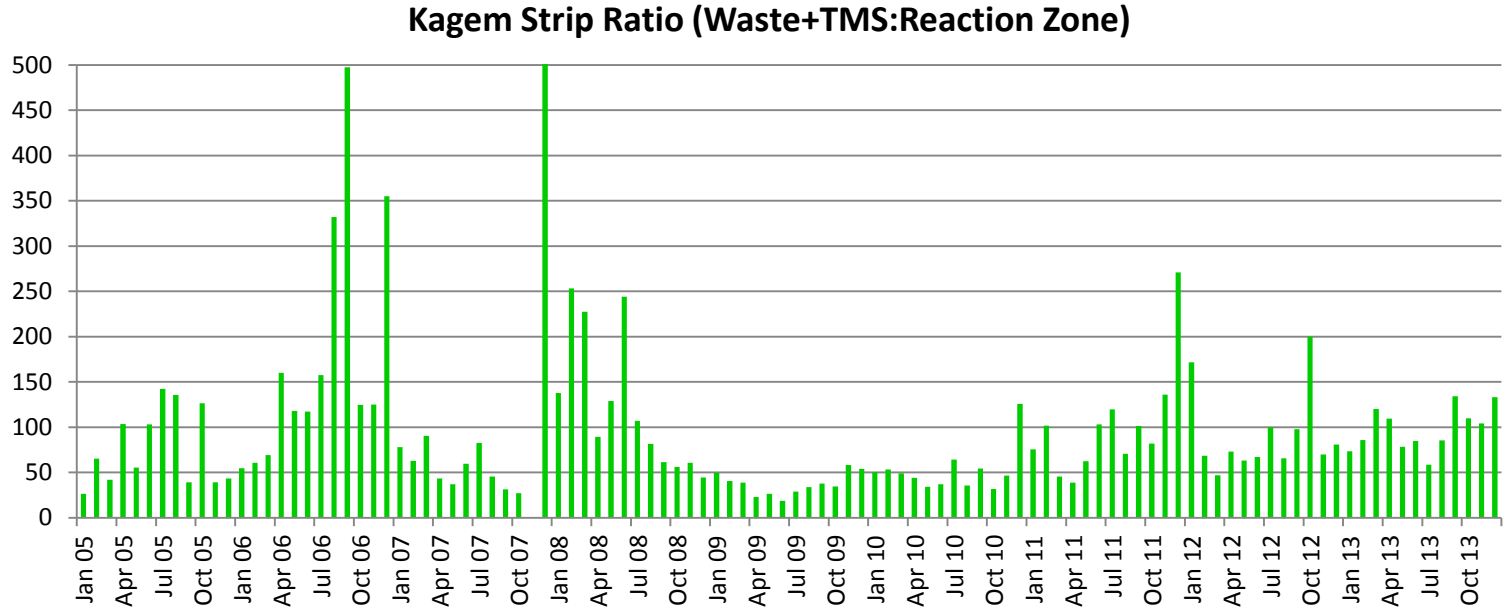
1. Average monthly ore mining (called “Reaction Zone”) in the quarter ending 31 December 2013 stood at 5,741 tonnes (versus 7,145 tonnes per month in the prior quarter).

Kagem Monthly Ore Grade



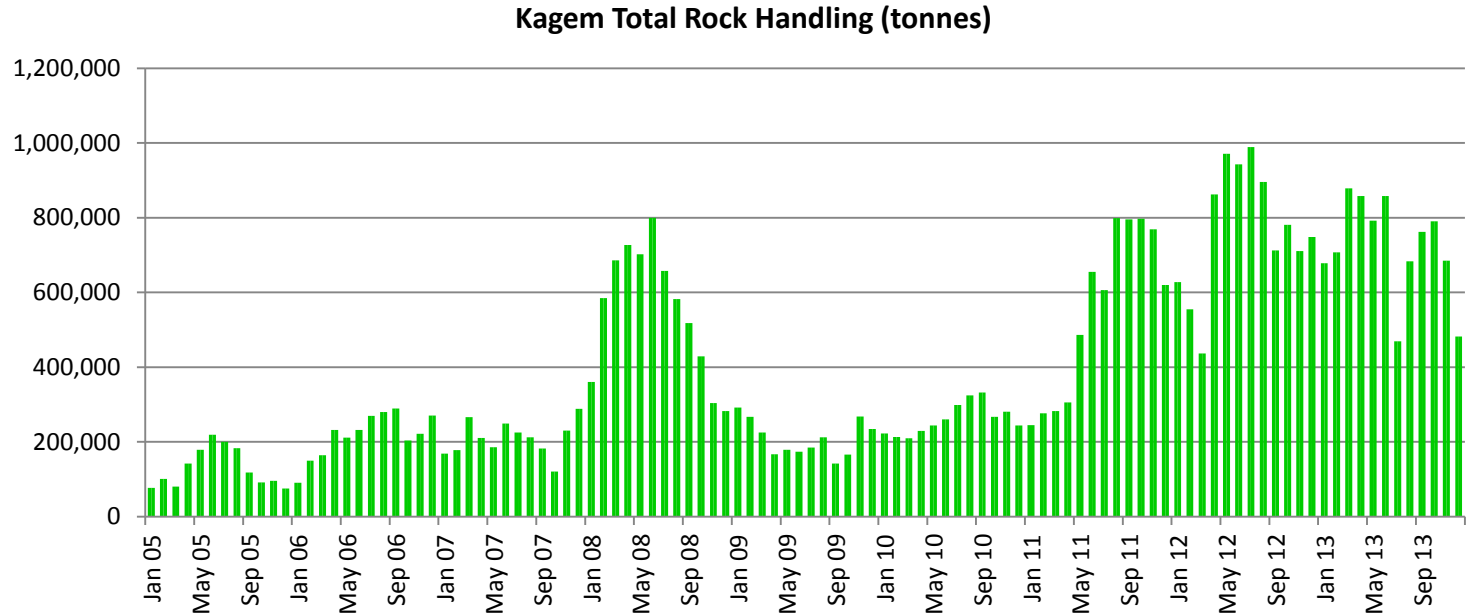
1. During the quarter ending 31 December 2013, the ore grade averaged 224 carats per tonne (compared with 302 carats per tonne in the prior quarter).
2. Since January 2005, Kagem's cumulative grade is approximately 310 carats per tonne.

Kagem Monthly Stripping Ratio



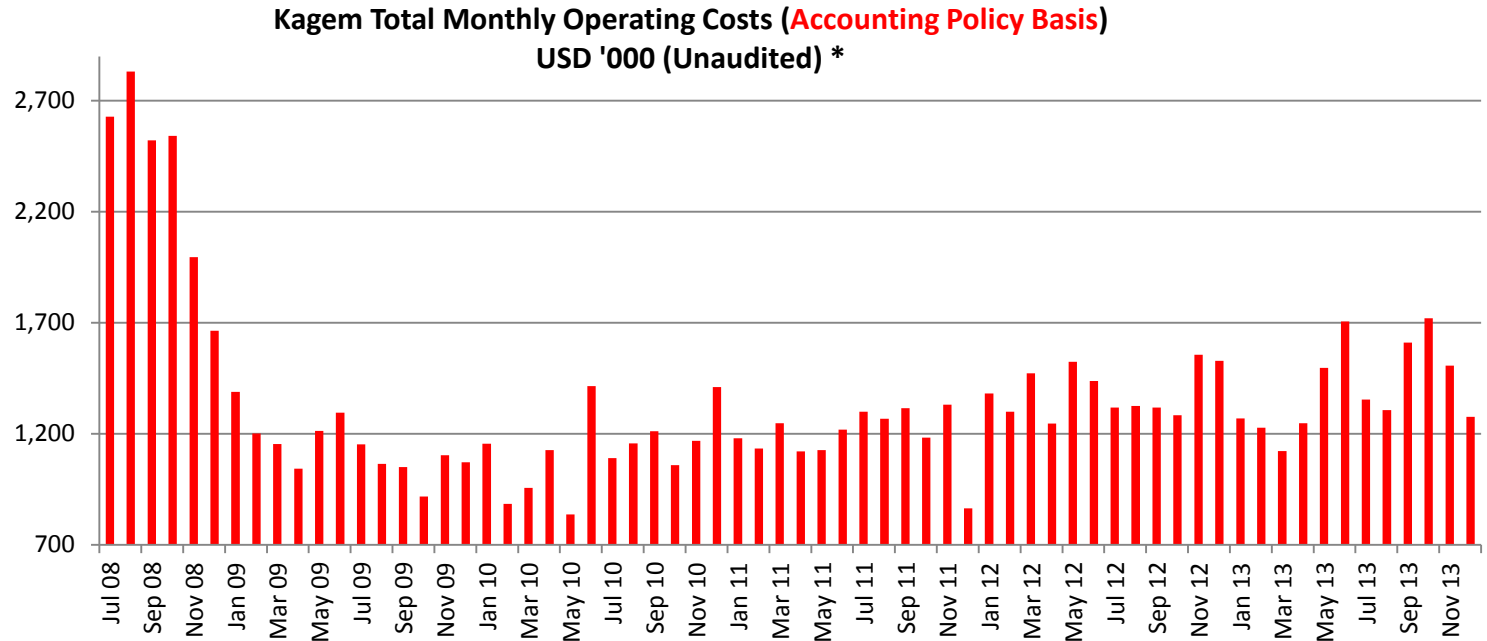
1. The early stages of Gemfields' management of Kagem (which commenced November 2007, with ownership occurring from June 2008) was characterised by the removal of a backlog of waste to open new ore areas for future production.
2. Kagem has been carrying out another waste stripping exercise (or "pushback") for around the last 18 months.
3. The collective stripping ratio from January 2005 through December 2013 is 76:1.

Kagem Total Monthly Rock Handling



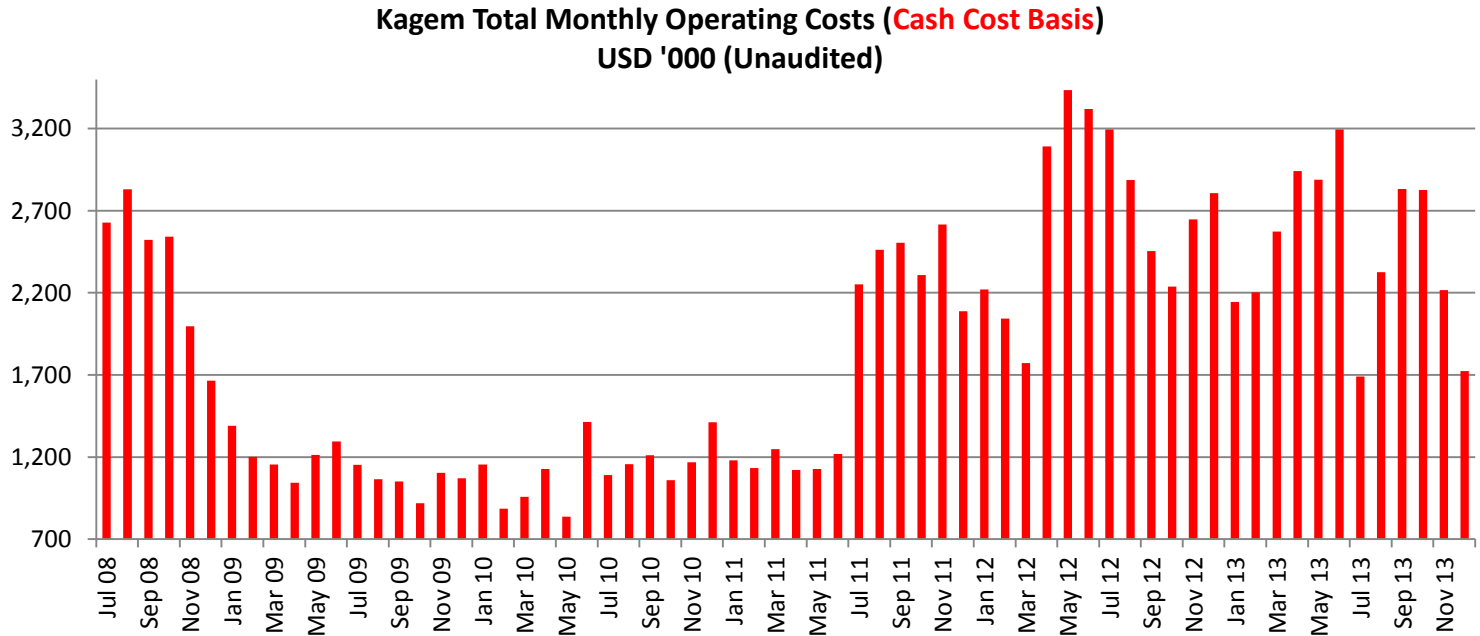
1. Significant volumes of rock were handled in the early months after Gemfields took over management of Kagem (in November 2007) to open new production areas.
2. A further waste stripping programme (or “pushback”) was initiated in May 2011.

Kagem Total Monthly Operating Costs (unaudited)



1. From November 2008 to May 2011, significant reductions in monthly operating costs have been achieved primarily through a reduction in the stripping ratio and improved operating efficiencies.
2. With effect from July 2011, Gemfields adopted a new accounting policy whereby all waste moving costs are capitalised and are then subsequently amortised when the corresponding ore in that area is mined (in keeping with the accounting principle of “matching costs to revenues”). To date, approximately USD 35.11 million of waste moving costs have been capitalised and the cumulative cost will be amortised later during the mining of the ore associated with that waste. Accordingly, the cost of the present pushback exercise will not be seen in the graph above until such time as the corresponding ore is mined.

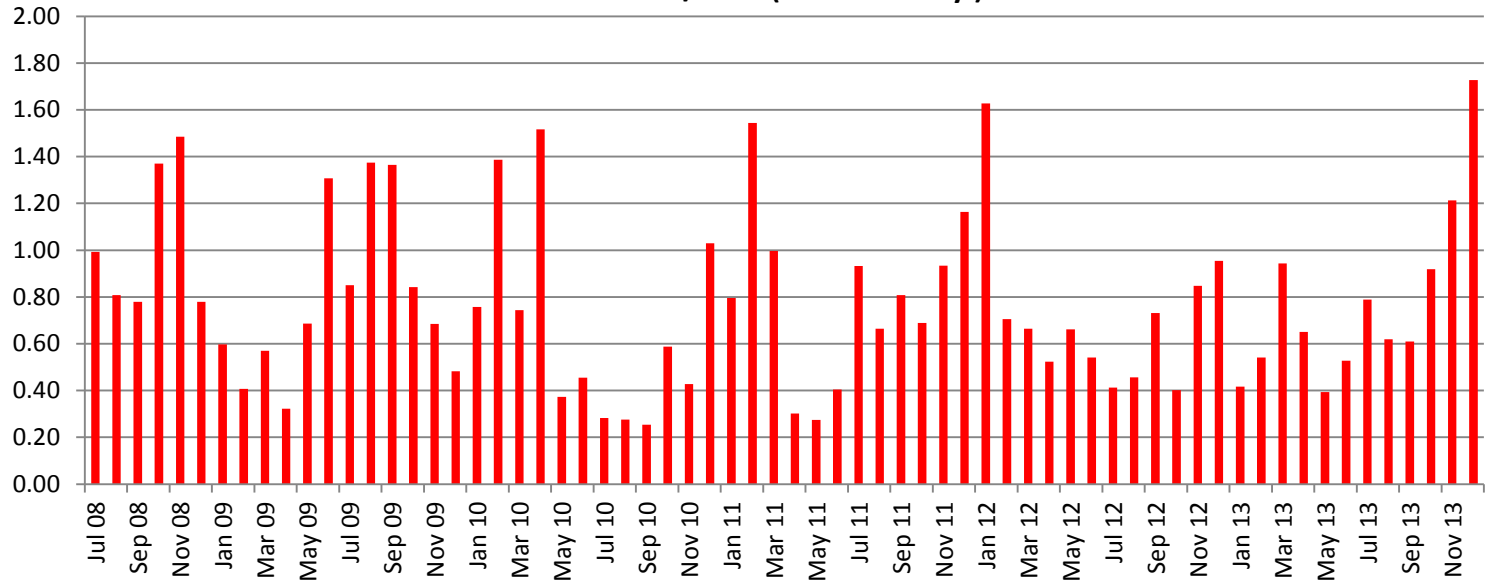
Kagem Total Monthly Operating Costs (unaudited)



1. From November 2008 to May 2011, significant reductions in monthly operating costs have been achieved primarily through a reduction in the stripping ratio and improved operating efficiencies.
2. Unaudited total cash operating costs in the quarter ending 31 December 2013 were USD 6.8 million (i.e. including pushback / stripping costs).

Kagem Unit Operating Costs (unaudited)

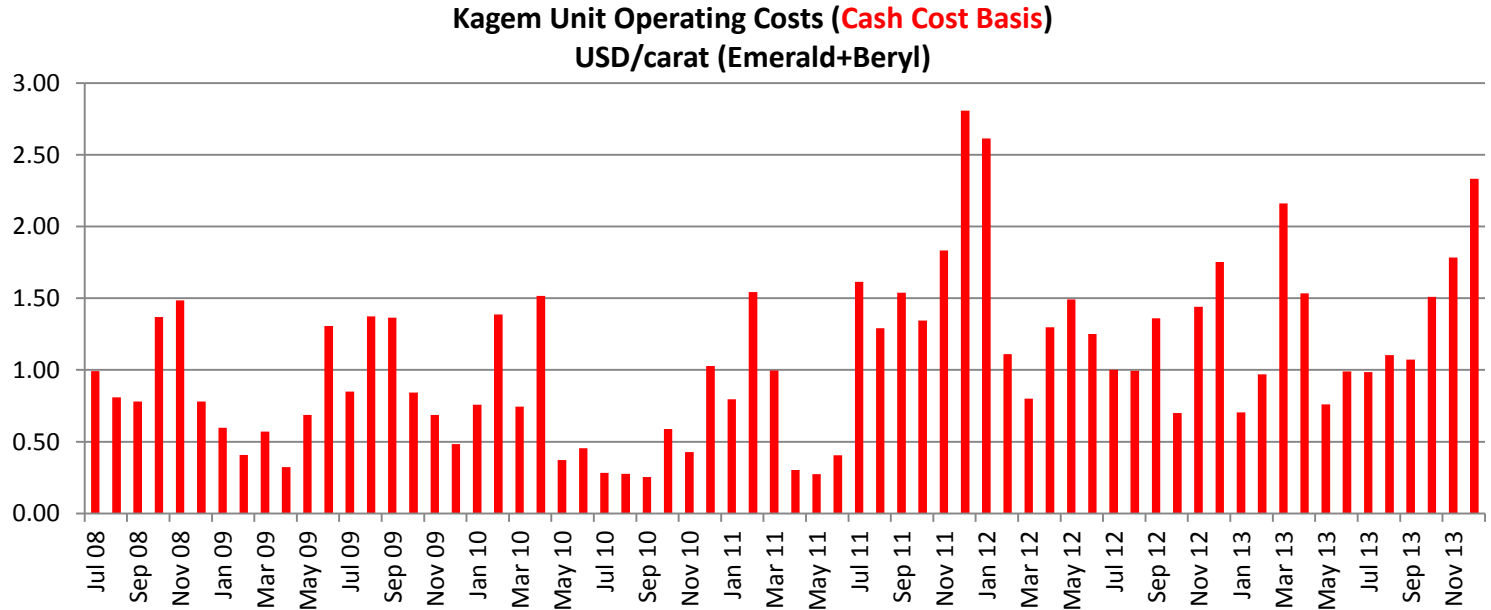
Kagem Unit Operating Costs (**Accounting Policy Basis**)
USD/carat (Emerald+Beryl)



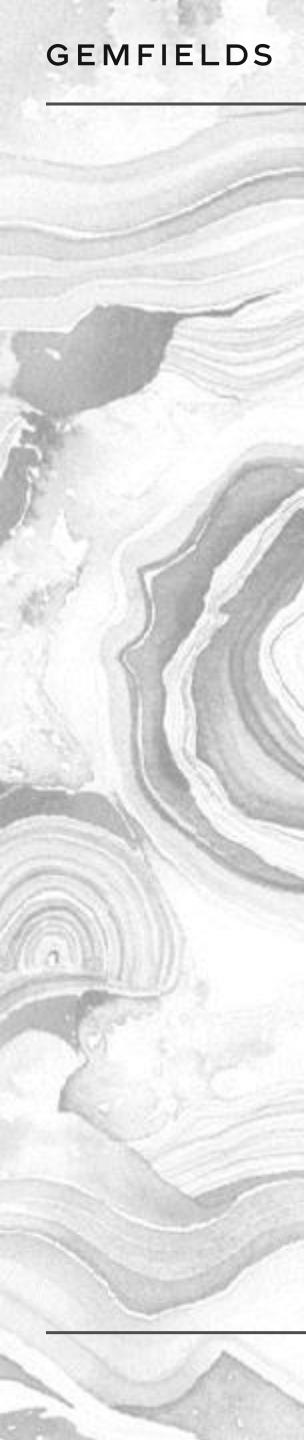
1. Kagem's average unit production cost during the quarter ending 31 December 2013 was approximately USD 1.17 per carat (excluding capitalised pushback / stripping costs).
2. Kagem's average unit production cost during the nine quarters ending 31 December 2013 was approximately USD 0.65 per carat (excluding capitalised pushback / stripping costs).

*Note: With effect from July 2011, Gemfields adopted a new accounting policy whereby all waste moving costs are capitalised and are then subsequently amortised when the corresponding ore in that area is mined. To date approximately USD 32.8 million of waste moving costs has been capitalised and the cumulative cost will be amortised later when the ore associated with that waste is mined.

Kagem Unit Operating Costs (unaudited)



1. Kagem's average unit production cost during the quarter ending 31 December 2013 was approximately USD 1.76 per carat including pushback / stripping costs.
2. Kagem's average unit production cost during the nine quarters ending 31 December 2013 was approximately USD 1.22 per carat (emerald + beryl).



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