

GEMFIELDS

KAGEM MINING

A GEMFIELDS Group Company

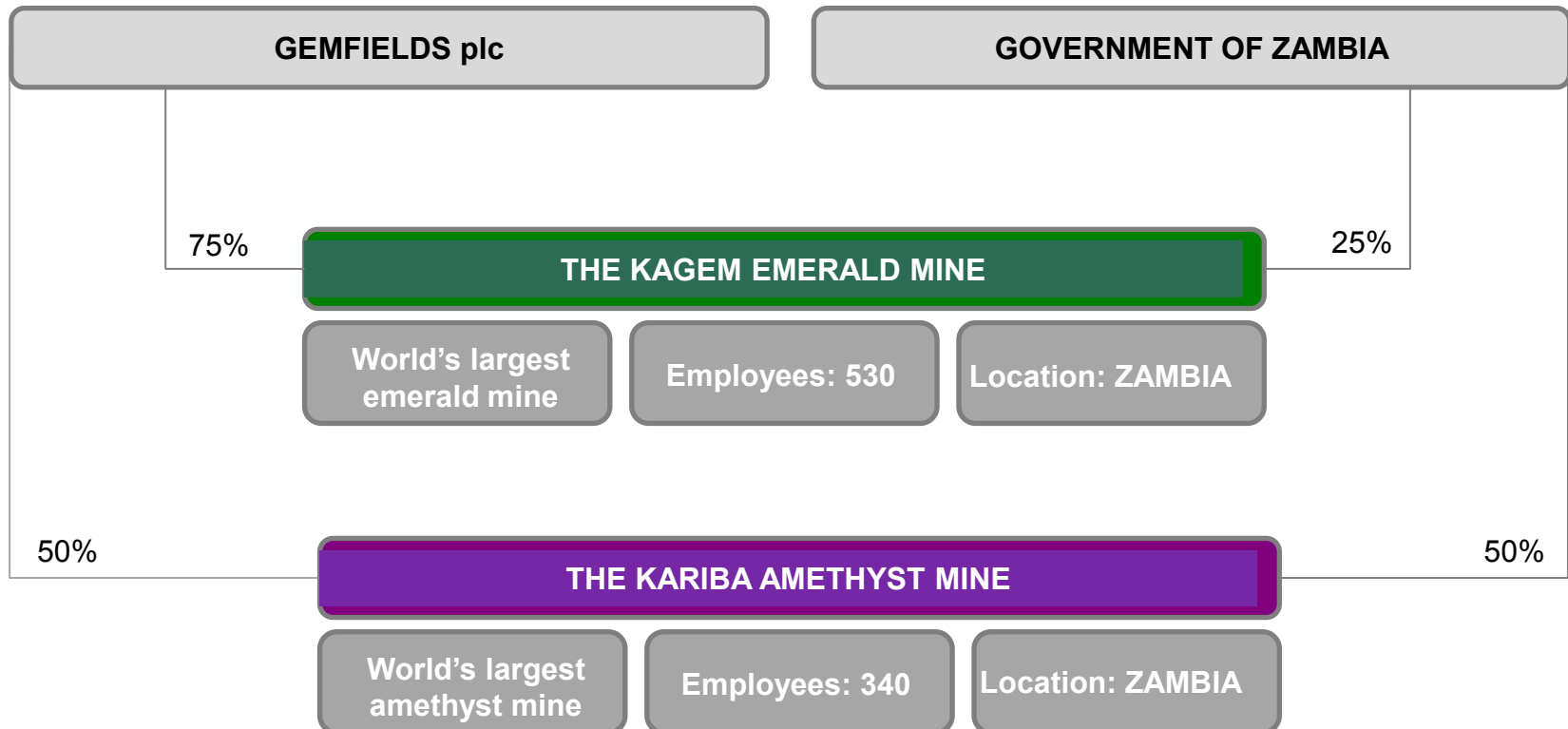


Welcome to the Kagem Emerald Mine

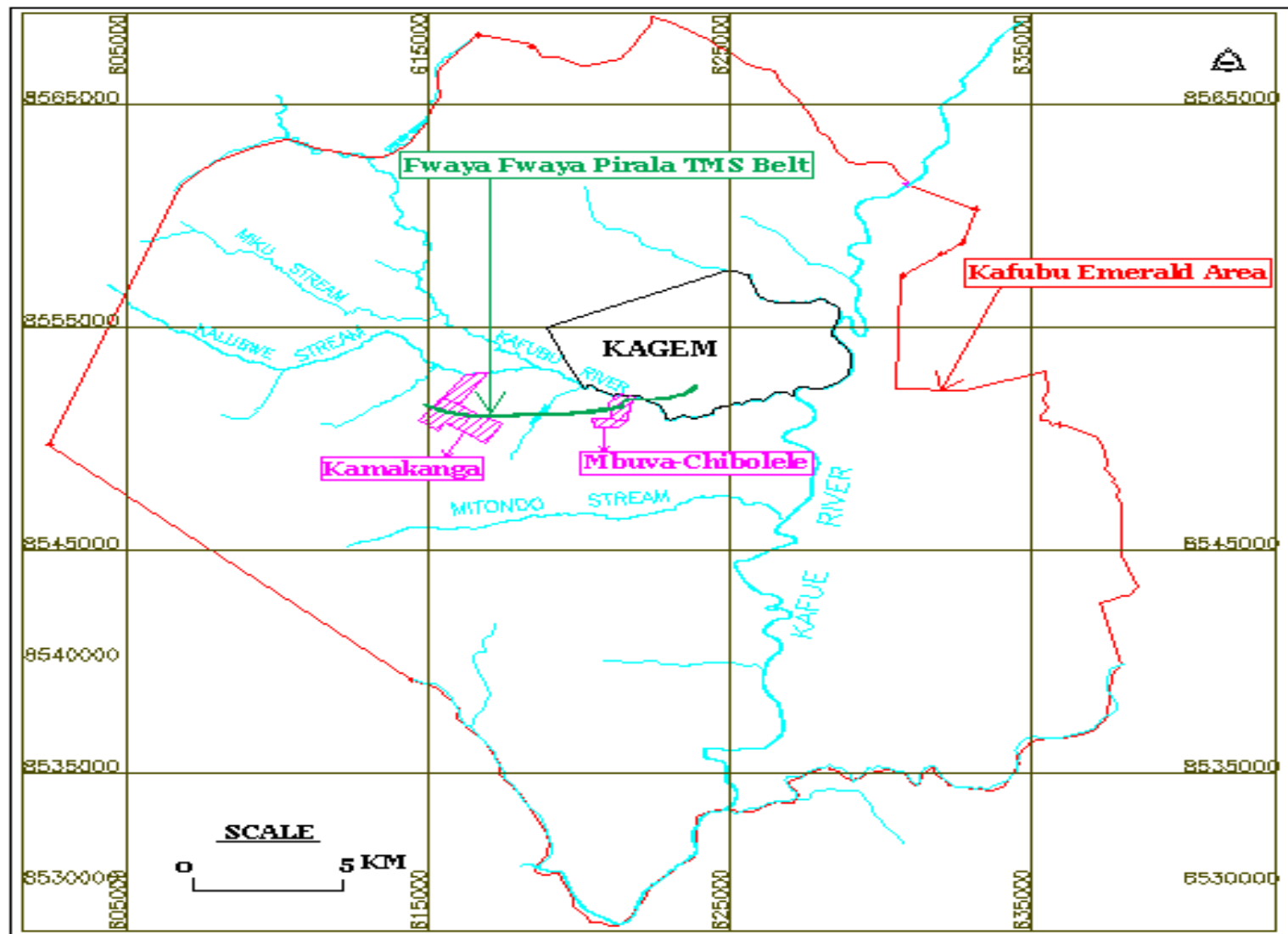


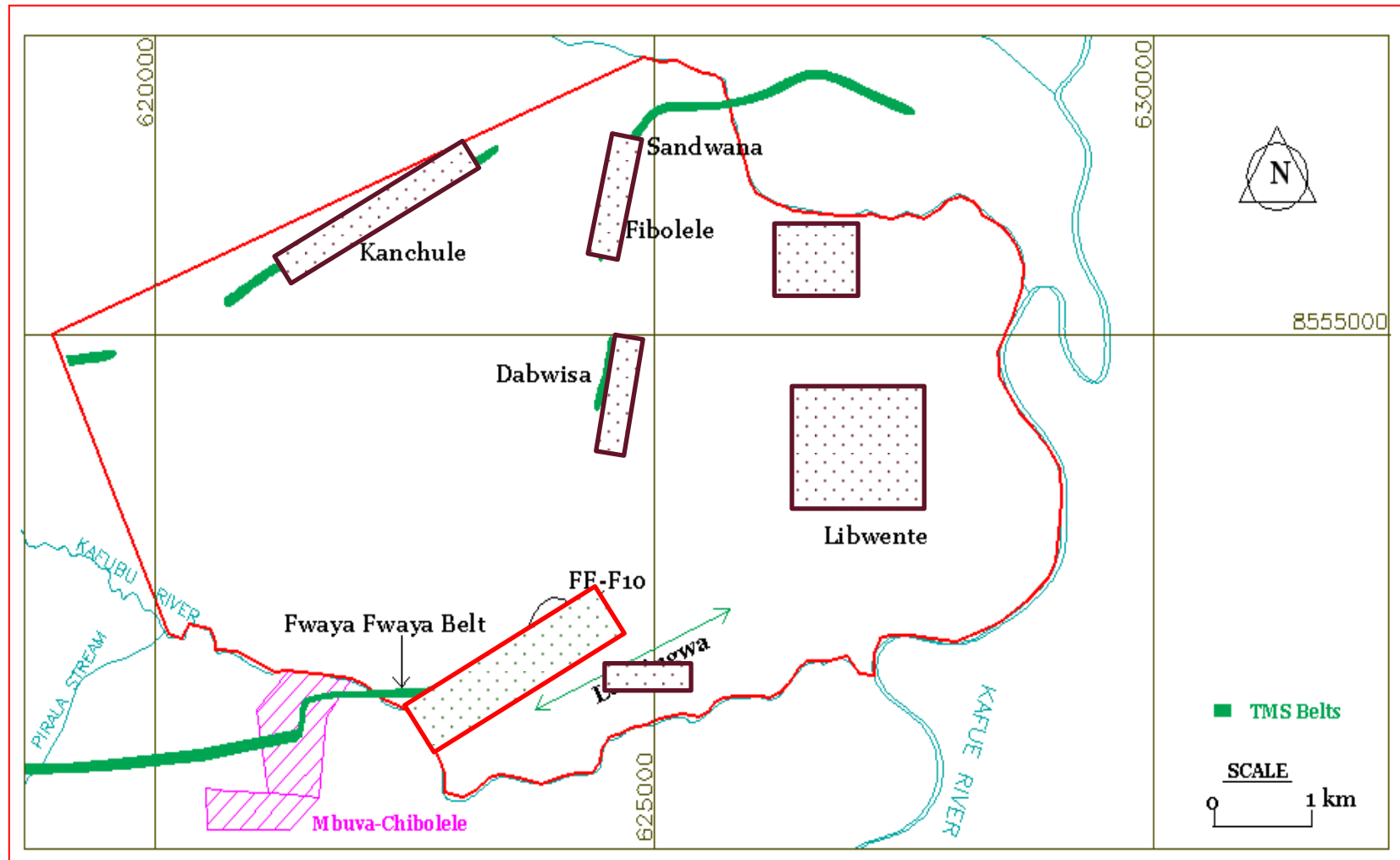
Gemfields & The Government of Zambia

A MODEL COLLABORATION



Kagem Location In Kafubu Emerald Area



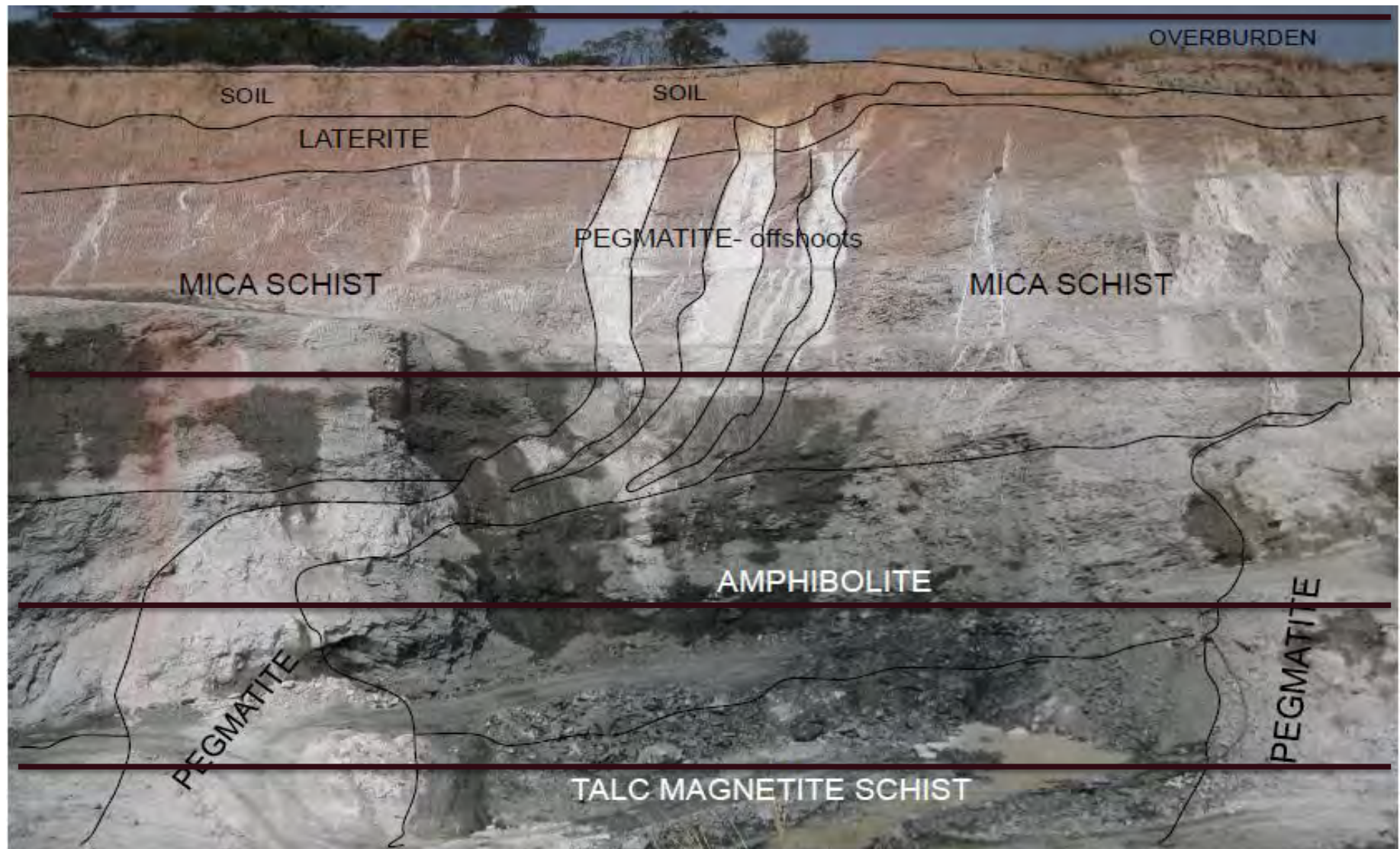


AREA ACTIVELY MINED

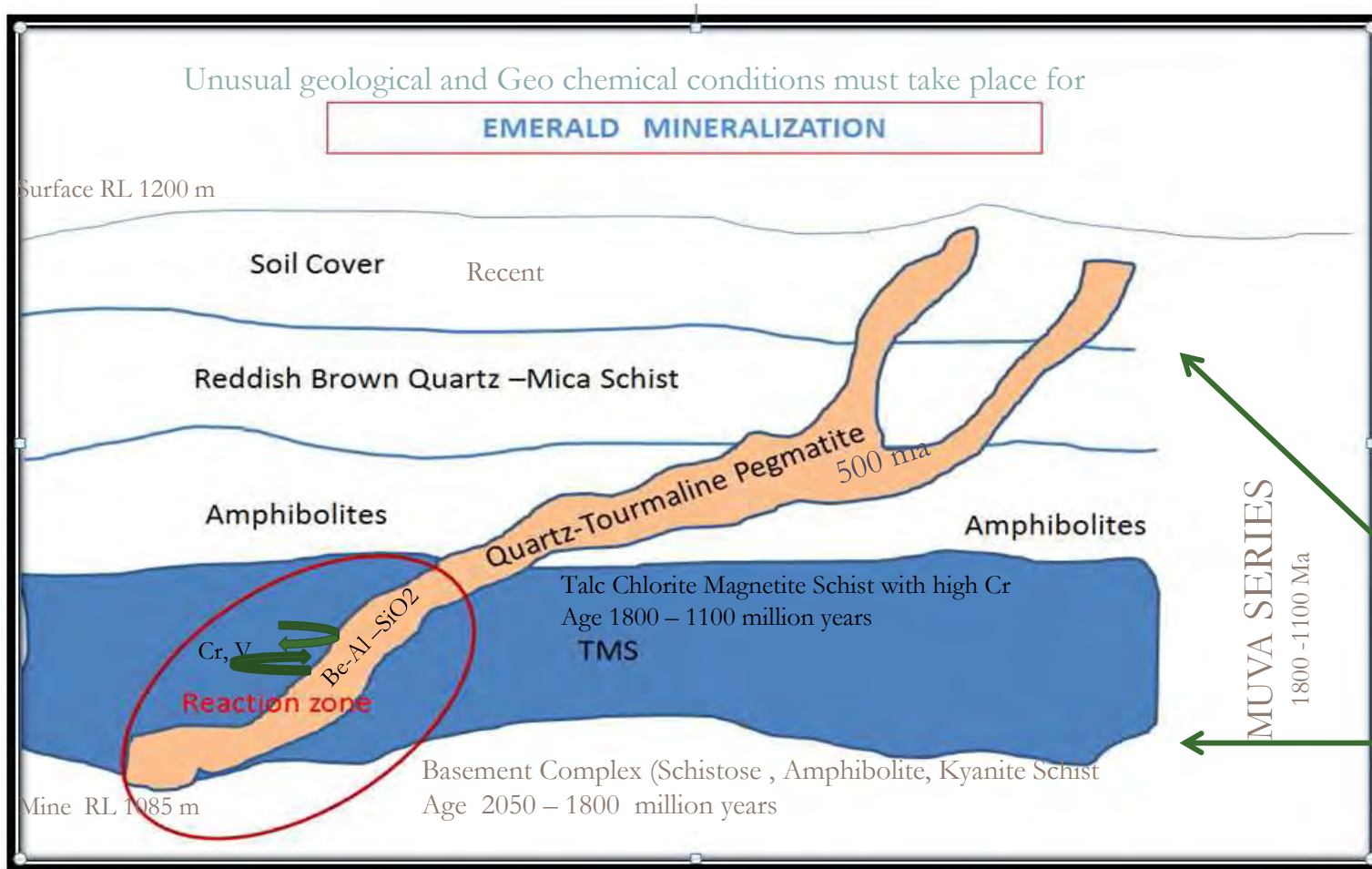


POTENTIAL AREA FOR MINING IN FUTURE

The Pit — A Cross Section



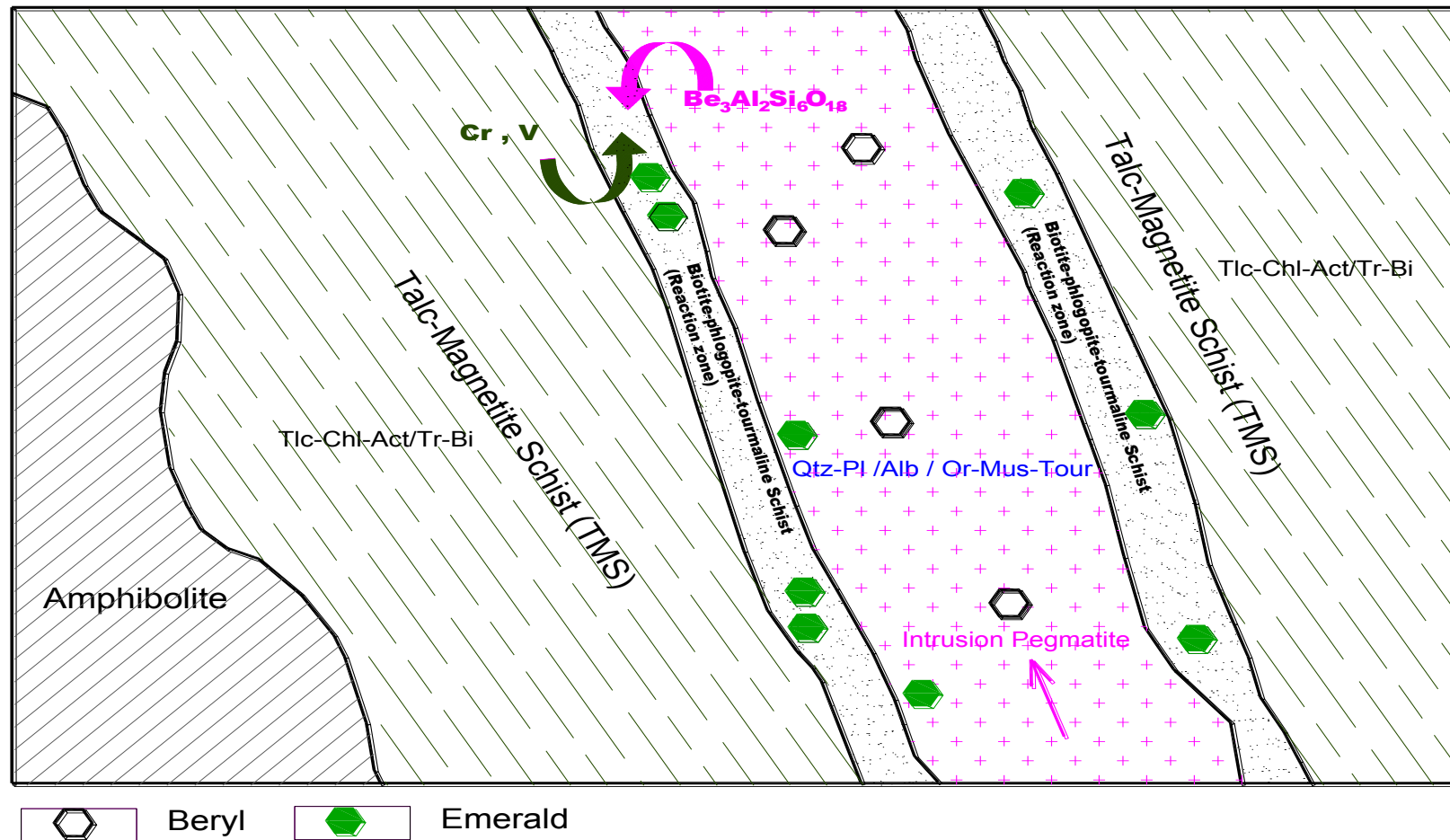
Emerald Mineralization Explained



Zambia Stratigraphic Sequence

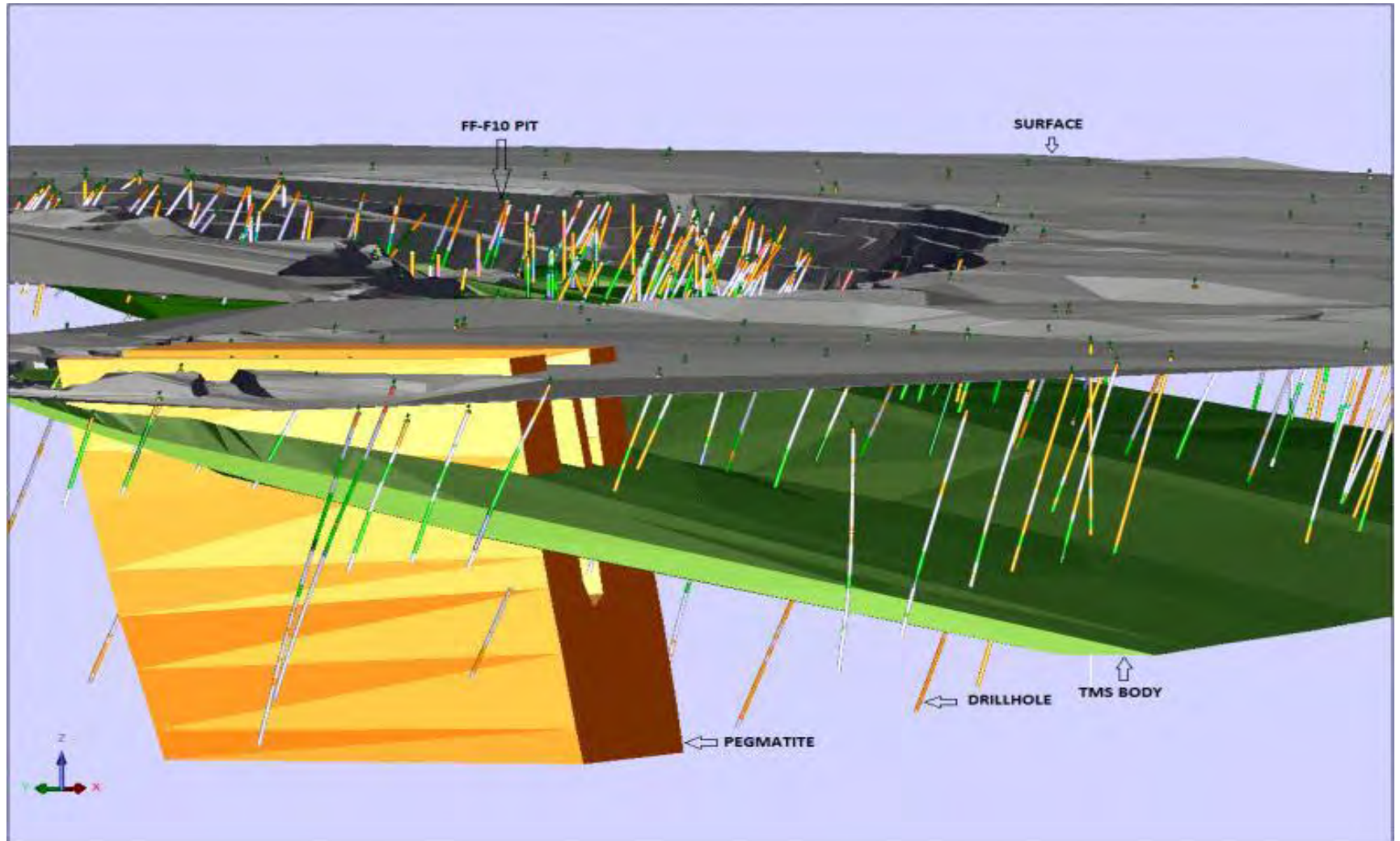
SUPERGROUP	MAJOR GROUP (and some equivalents)
	Kalahari
	Lufu Formation
Karoo	Upper Karoo
	Lower Karoo
	Kataba
	Kundelungu
	Mwashia Fm.
Katanga	Mine Series (Broken Hill) (Monze) (Solwezi)
	Manshya River
Muva	Mpanshya (Sasare) (Mitoba River)
	Mporokoso (Kafue) (Fombwe)
Basement	Kapemba (Nakonde)
	Mulungwizi (Mvuye) (Mkushi)

IDEAL CONDITIONS FOR EMERALD MINERALISATION



- Occurrence of Host rock (TMS) and presence of Chromiferous elements (Cr, V) in its composition.
- Intrusion of Pegmatite containing Beryllium elements.
- Alteration / Reaction / Ionic exchange between the pegmatitic fluids and the host rocks.
- Incorporation of Cr/ V & Be under exceptional geological and geochemical conditions, 590 -630 deg temperature and 400-600 MPa pressure results in emerald mineralisation.

SURPAC MODEL



Inherited Problems

- Huge waste removal backlog
- Rock handling — only 125,000 tonnes p/month
- Ore handling — only 3,000 tonnes p/month
- No ore at the pit bottom for production
- Very poor equipment health
- Broken Machinery was spread across the property and lay wherever they had broken down
- Ineffective security systems
- No formal reporting structures and accountability
- De-moralized management and work force
- Poor health and safety

Pit Position in 2008 prior to Gemfields ownership



And Today...





In-pit dumping is done in the mine — using a strip and fill method. This keeps the size of the both pit and dumps small, and ensures that the environmental liability is as low as possible.



Pit Stability — Our Priority



Emerald Mining at Kagem Today

- Gemfields has been investing huge amounts in millions of dollars (interest free) for sustainable development of the mine each year.
- Procurement of new fleet of mining equipment.
- 33 KV Electrification line at mine connected to the national grid at a cost of US\$ 600,000.
- Detailed mine plan finalized for five years, up till June 2014-15, now in the process of preparing the Business Plan for the next 3 / 4 years.
- Approved Environment Project Brief including EMP in place.
- Safety-Health-Environment focus: One of the many first in emerald sector.



Emerald Mining at Kagem Today Continued...

- Kagem is now a world class mine and is a matter of pride to the work force for them to be belonging to Kagem.
- State-of-the-art Mine Planning Division: Proper benching, smooth haul roads, and improved reconciliation.
- Closer Supervision: Regular shift meetings and Pit offices for operational and maintenance crews set up at the pit top.
- Concerted effort to improve on health, environmental and safety standards.
- All employees are unionized and represented by elected representatives Collective Agreement with the Union.

Turn Around Strategy

- Fresh Investment In All Resources. And emphasis is on improving the resource base of the mine.
- Multifold Expansion of Mining Operations – TRH From 125,000 To 750,000 tonnes p/month.
- Increased Ore Mining Rate From 3,000 tonnes p/month to 8,000 tonnes p/month.
- Effective Utilization of Capital, Human and Machine Resources.
- State-of-the-Art technology in all phases of Exploration, Design, Planning, Mining, Processing and Security.
- Standardisation and Benchmarking of processes with Standard Operating Procedures In Place.

Turn Around Strategy

- Collective Agreement with Union completed and implemented for the year 2012-2014, effective from 1st April 2012.
- Kagem was one of the first companies in Zambia to implement the Collective Agreement in time.
- Earlier only 19 employees were covered in the Collective Agreement. Due to the Management's initiative, all are covered and fall under one umbrella, all are unionized and represented by elected representatives. All the employees are now on renewable 5 year contracts as opposed to the earlier 2 year contracts.
- The Management had to spend \$1.2 million in addition to its normal monthly expenditure after the successful negotiations in harmonizing the labor force at a time when the company was in a position of a cash crunch.
- The National leadership of the union has commended the efforts of the Management in this regard
- The company sponsored a couple of workshops for the Union Branch Representatives and shop stewards to understand their role better
- Various HR policies like Group Recruitment Policy, Group Leave Policy, Group Redundancy Policy, Group Disciplinary Policy & Procedure and Group Grievance & Complaints Policy have been implemented

Emerald Mining At Kagem

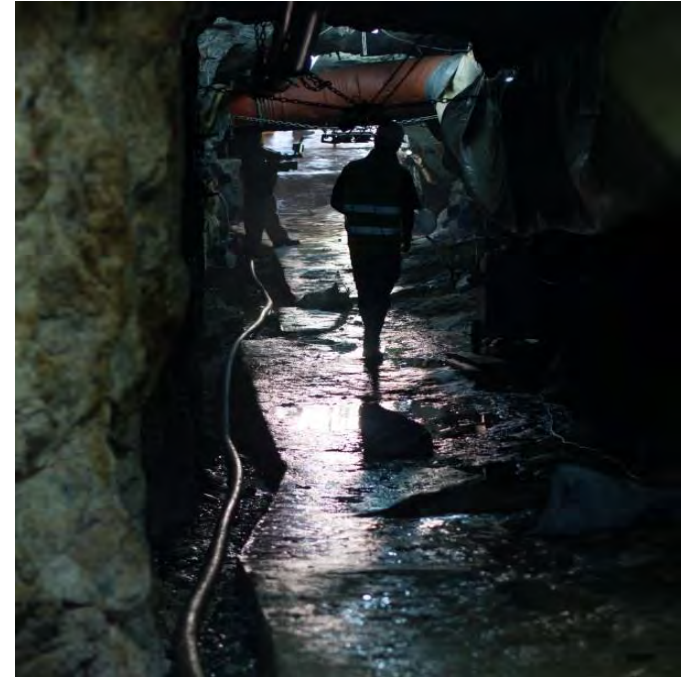


Manual Mining



Mechanised Mining

Pilot Underground Project



- The First professional underground Emerald mining attempt in Zambia.
- To understand and develop the Geotechnical/Geological setup for large scale underground operation.
- Existing underground operation includes 400m long adit and six cross cuts to mine emerald.
- SRK feasibility study for large scale underground operation at main pit completed

The Results

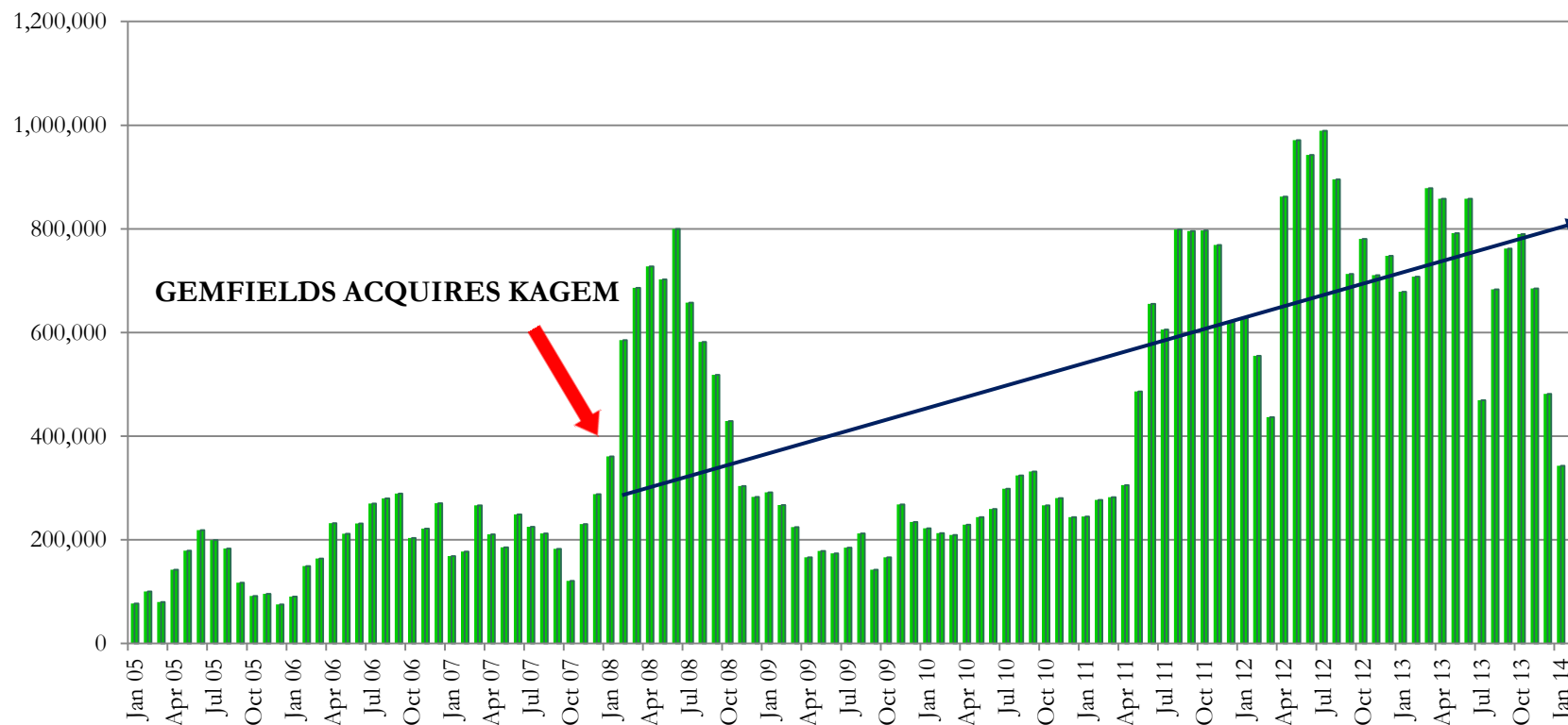
- Gemfields is committed to the long-term re-capitalisation of the Kagem mine, and after an investment in excess of K580 million (US\$ 108 million) till June 2013, it continues to re-invest around K150 million (US\$ 27 million) into the mine each year.
- This policy has been directly responsible for Kagem's success in recent years, ensuring that Kagem – and Zambia as a Nation – is increasingly recognised as a global leader in the coloured gemstone industry, and allowing Kagem to become the single largest emerald industry contributor to Zambia's National Economy, despite it being just one of Zambia's numerous registered emerald producers and exporters.
- The approach has already turned Kagem around, from a long history of loss making to one where it has been able to increase achievable prices on the global markets almost tenfold and where it has been able to contribute more than KR 687 million (US\$ 127 million) to Zambia's direct foreign earnings over the past three years alone.
- All these earnings have been repatriated back to Zambia, where they have been used to settle old debts inherited from the previous management and continually reinvest in the Kagem mine and the global marketing of Zambian emeralds.
- It paid Corporate Tax for the first time in the history of Kagem.
- It paid Dividends to its shareholders for the first time in the history of the company.

The Results Continued...

- Transparency introduced in emerald auction procedure by inviting Zambian Government stake holders, for eg, representatives from the Ministry of Finance and the Ministry of Mines to participate in the auctions. The Director on the Board of Kagem, nominated by the Zambian Government, witnesses and approves the auction results in a Board Meeting before the official announcement of the results.
- Enhanced revenue through sales strategy & marketing.
- New sorting and grading system introduced in the company to increase sales revenue.
- Zambia's image has improved immensely in the world market. Zambian emeralds are most sought after by the buyers now.
- Emphasis is on improving the resource base of the mine.
- Increased exploratory drilling, mapping of all pegmatites and resource calculations using mining software has improved the technical input of the mine.

Kagem – The World's Largest Emerald Mine

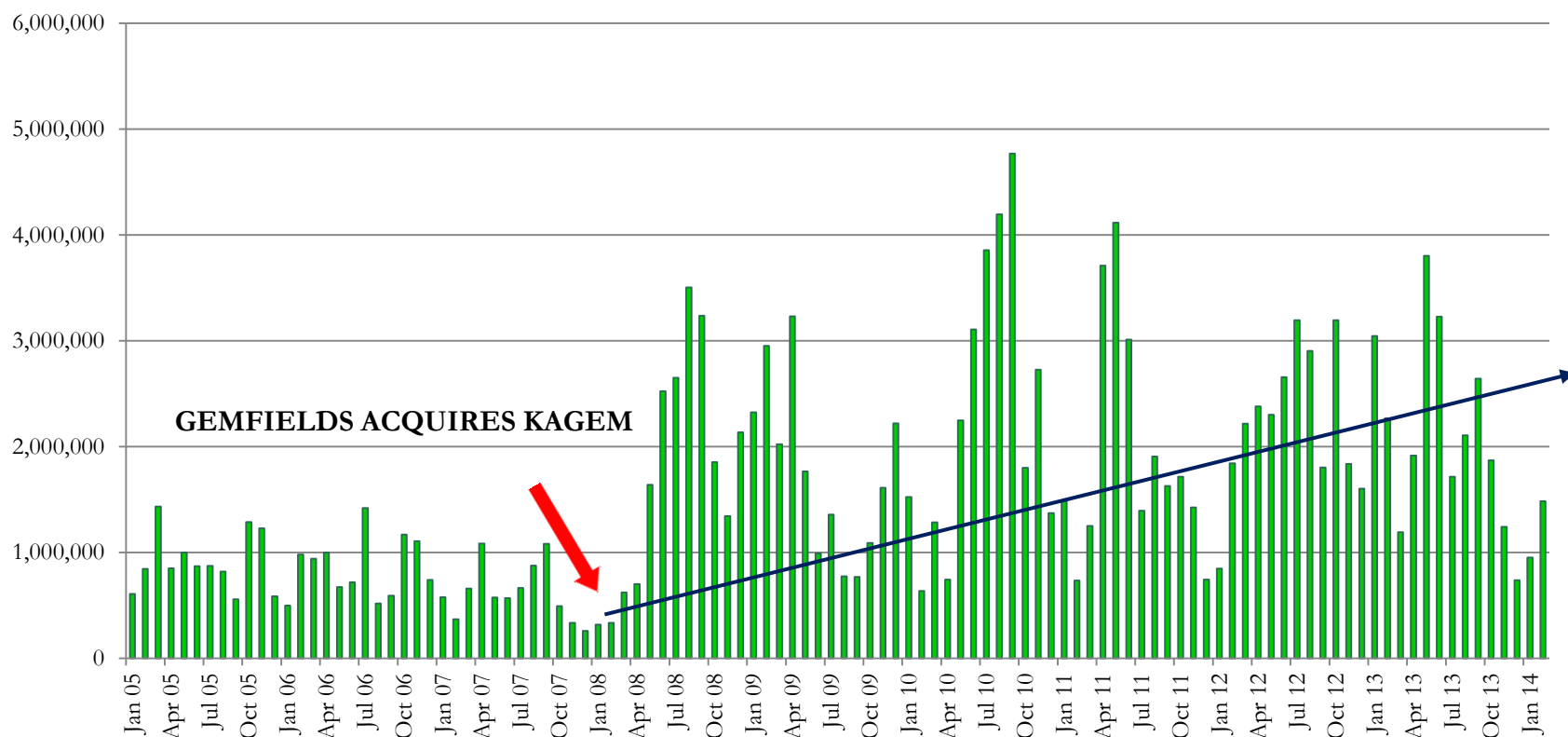
Kagem Total Rock Handling (tonnes)



Recently, Kagem has been moving around 750,000 tonnes per month.

Kagem Monthly Gemstone Production (Carats)

Emerald & Beryl



Wash Plant At Kagem

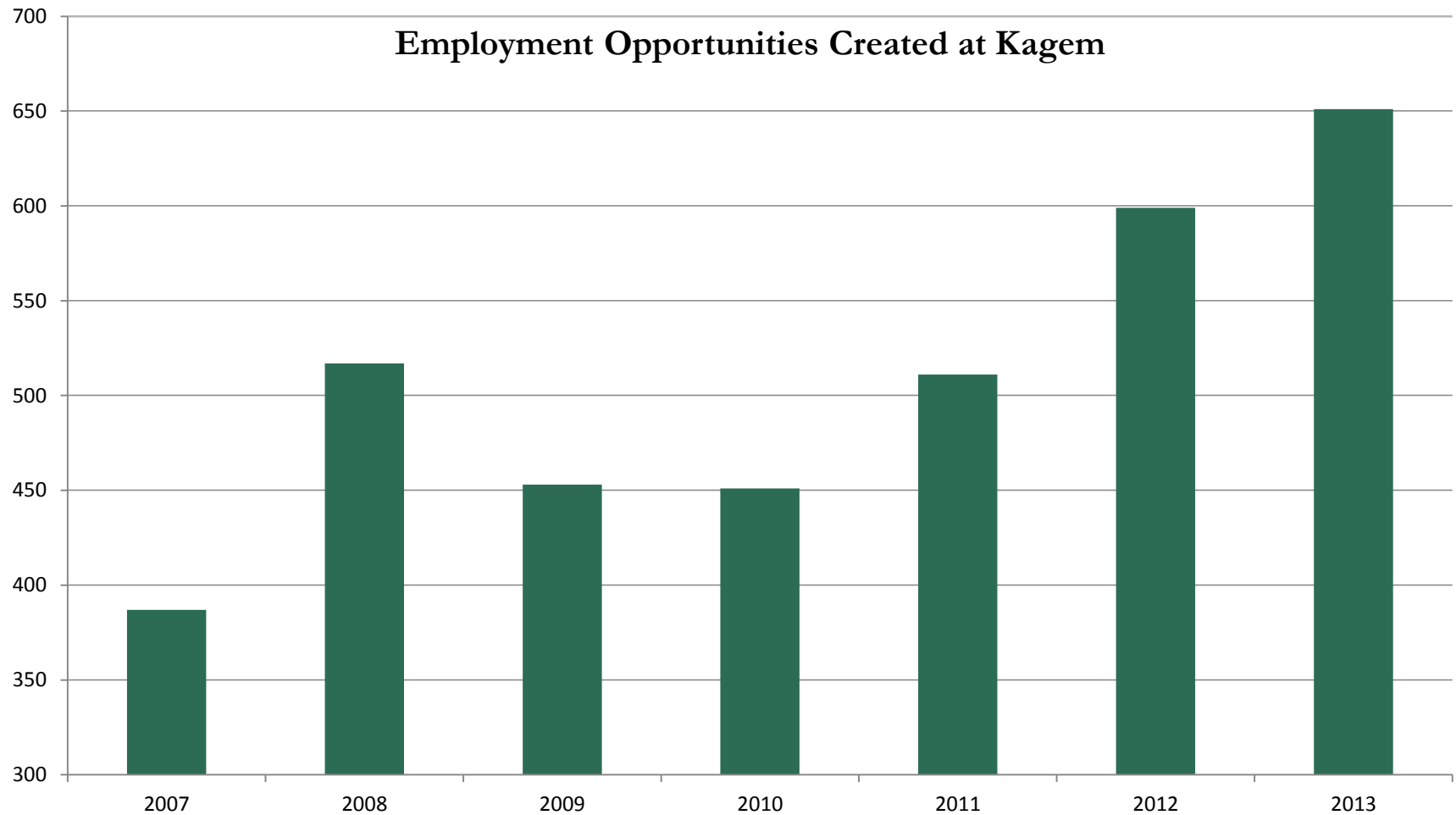


Value addition — Grading Zambian Emeralds at Kagem

- First time a Grading system is formulated by Kagem For Zambian Emerald.
- This has helped the customer to get consistent supply Of the Zambian emerald for their product.



Value Addition — Local Employment



Transparency — We Publish Everything

AUCTION RESULTS (HIGHER QUALITY)

Details	JUL '09	NOV '09	JUL '10	DEC '10	JUL '11	MAR '12	NOV '12	JUL '13	FEB '14
Dates	20-24 Jul '09	23-27 Nov '09	19-23 Jul '10	6-10 Dec '10	11-15 Jul '11	19-23 Mar '12	29 Oct - 2 Nov '12	15-19 Jul '13	21-25 Feb '14
Location	London, UK	Johannesburg, SA	London, UK	Johannesburg, SA	Singapore	Singapore	Singapore	Lusaka	Lusaka
Type	Higher Quality	Higher Quality	Higher Quality	Higher Quality	Higher Quality	Higher Quality	Higher Quality	Higher Quality	Higher Quality
Carats offered (million)	1.36	1.12	0.85	0.87	1.07	0.77	0.93	0.58	0.84
Carats sold (million)	1.36	1.09	0.8	0.75	0.74	0.69	0.9	0.58	0.62
No. of companies placing bids	23	19	37	32	38	29	35	36	34
Average no. of bids per lot	10	13	18	16	16	11	11	8	13
No. of lots offered	27	19	27	19	25	23	19	18	17
No. of lots sold	26	14	24	18	18	20	16	18	15
Percentage of lots sold	96%	74%	89%	95%	72%	87%	84%	100%	88%
Percentage of lots sold by weight	99.80%	97%	94%	86%	69%	89%	98%	100%	74%
Percentage of lots sold by value	82%	76%	87%	99%	91%	94%	90%	100%	86%
Total sales realised at auction (US\$ Million)	5.9	5.6	7.5	19.6	31.6	26.2	26.8	31.5	36.5
Average per carat sales value	USD 4.40/carat	USD 5.10/carat	USD 9.35/carat	USD 26.20/carat	USD 42.71/carat	USD 38.25/carat	USD 29.71/carat	USD 54.00/carat	USD 59.31/carat

AUCTION RESULTS (LOWER QUALITY)

Details	MAR '09	MAR '11	NOV '11	JUN '12	APR '13	NOV '13
Dates	11-15 Mar 2010	10-14 Mar 2011	21-25 Nov 2011	9-13 Jun 2012	15-19 Apr 2013	11-15 Nov 2013
Location	Jaipur, India	Jaipur, India	Jaipur, India	Jaipur, India	Lusaka, Zambia	Lusaka, Zambia
Type	Lower Quality	Lower Quality	Lower Quality	Lower Quality	Lower Quality	Lower Quality
Carats offered*	28.90 million	16.83 million	10.83 million	10.85 million	17.34 million	5.62 million
Carats sold (million)	22.8	12.98	9.82	3.47	6.3	4.94
No. of companies placing bids	25	44	27	20	25	20
Average no. of bids per lot	8	14	9	3	6	7
No. of lots offered	56	35	26	33	28	21
No. of lots sold	49	34	19	17	23	19
Percentage of lots sold	88%	97%	73%	52%	82%	90%
Percentage of lots sold by weight	79%	77%	91%	32%	36%	88%
Percentage of lots sold by value	89%	76%	87%	99%	91%	91%
Total sales realised at auction (US\$ million)	7.2	10	11	9	15.2	16.4
Average per carat sales value	USD 0.31/carats	USD 0.77/carats	USD 1.12/carats	USD 2.61/carats	USD 2.42/carats	USD 3.32/carats

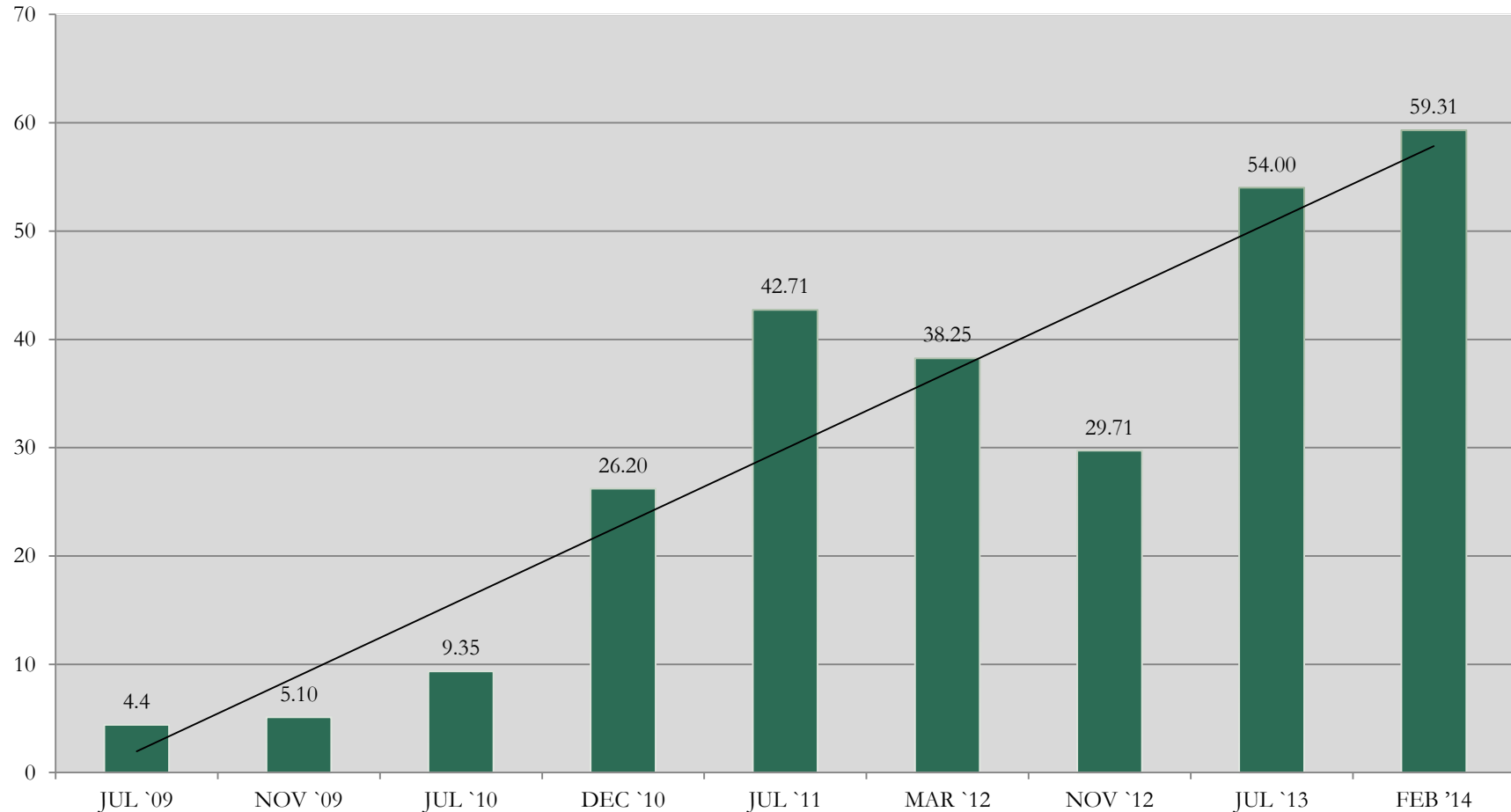
Bottom Line — We need to move 5 million units of rock to get 1 unit of gemstones!

Kagem's Auction Process Is Working

KAGEM ROUGH EMERALD & BERYL AUCTIONS: HIGH GRADE

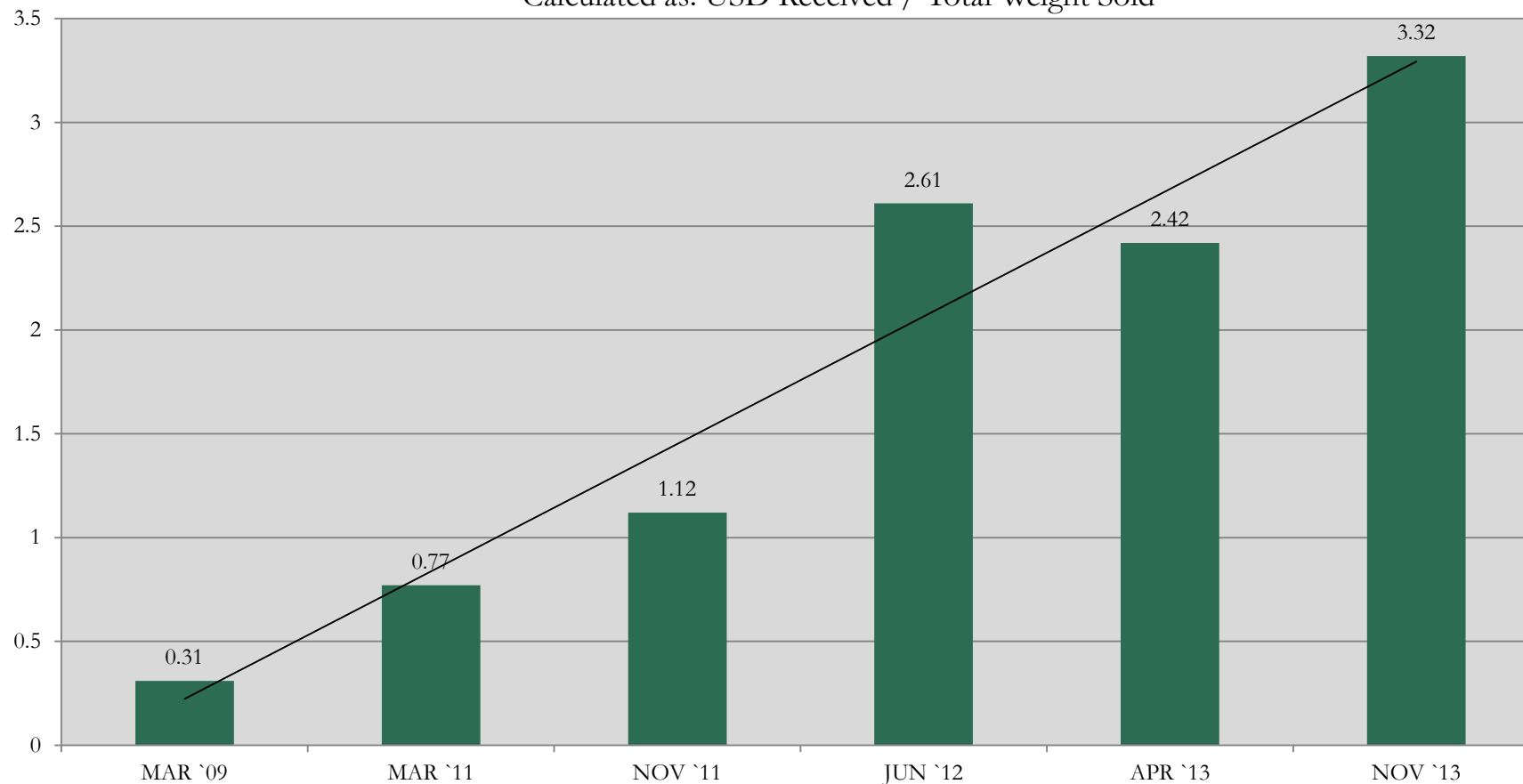
Actual Sales Price (USD/carat)

Calculated as: USD Received / Total Weight Sold



KAGEM ROUGH EMERALD & BERYL AUCTIONS: LOWER GRADE

Actual Sales Price (USD/carat)

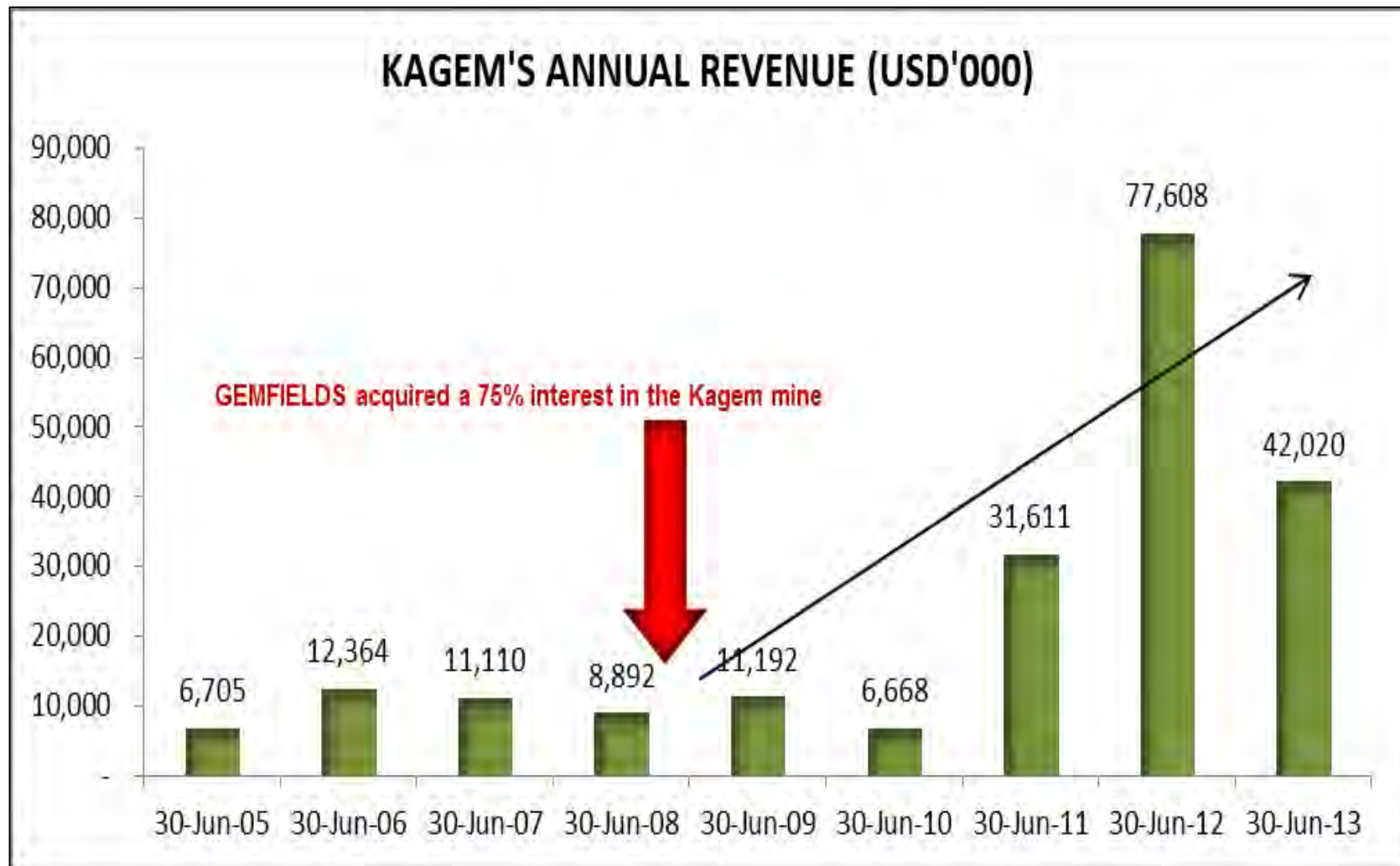
Calculated as: $\text{USD Received} / \text{Total Weight Sold}$ 

Safety First — An Outstanding Safety Record

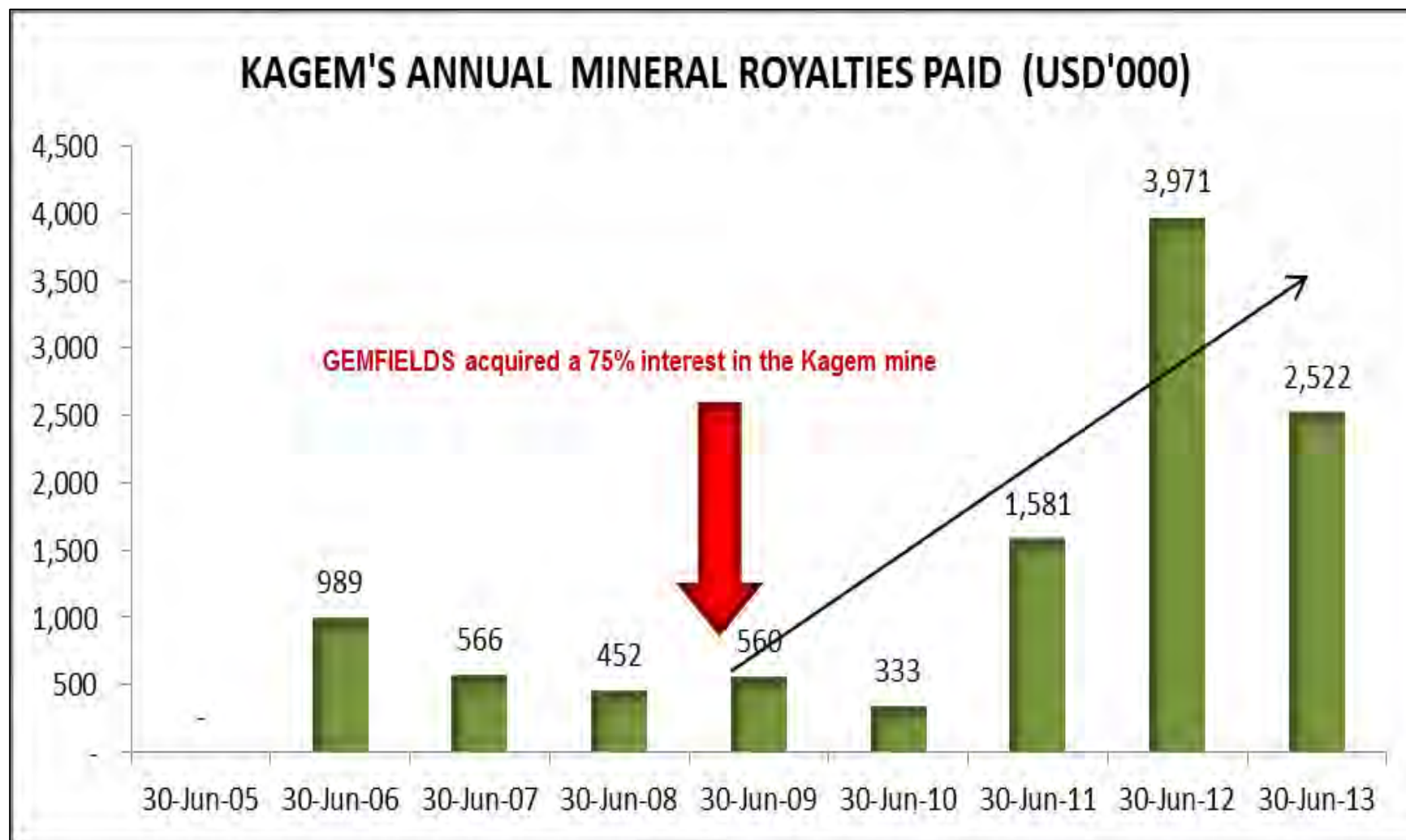
More than Two Million Eight Hundred injury free man-shifts recognised by the Mines Safety Department



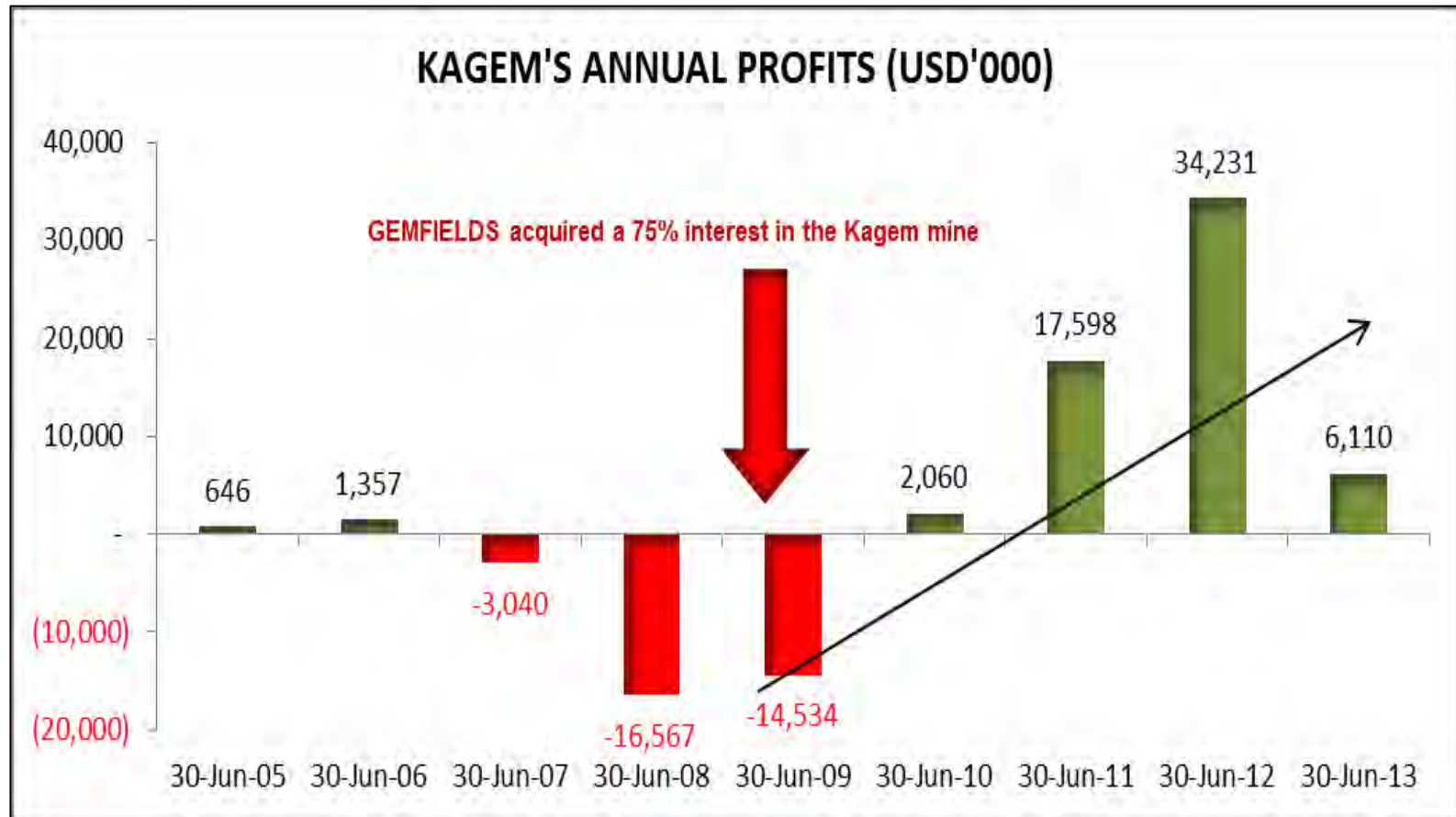
Kagem Revenues



Royalties Paid to Zambian Revenue Authority



Kagem Profits – The Ultimate Measure of Local Value Addition



Clear local value addition demonstrated

(i) Grading and Sorting (ii) Reliability (iii) Marketing (iv) Service

The first ever dividend paid by Kagem in its 29 year history and the first such payment to the Government of Zambia from any gemstone operation in Zambia.



Minister of Finance, Government Republic of Zambia, Hon. Alexander Chikwanda receives a K10.94m dividend cheque from Kagem Mining Chairman William B Nyirenda, flanked by the company's Director Operations CV Suresh, Head-Finance Irvine Mwitwa.

Corporate Social Responsibility

The CSR policy aims to ensure that our projects enjoy the maximum possible impact through adopting a sustainable long term strategy including all the stakeholders — but most importantly the local population.

- Major stakeholders include traditional establishment, all government departments with particular interest, District Commissioner's Office, Local Council, certain Community and Faith Based Organizations, farm groups, etc.
- This is aligned to our approach to government policies, objectives, targets, outlined in the Millennium Development Goals and The Vision - 2030.

The company has identified, together with the community, areas that would be supported. These sectors include the following:

- Education (Chapula Basic School, Kapila Community School, and Kafwaya Memorial Community School)
- Health (Nkana Clinic, Pilala Health Centre, and CHAMP)
- Food Security and Agriculture (Blessing Green Farms Cooperative, and Kapila Green Farms Cooperative)
- Culture through its traditional establishment (Chief Nkana and Chief Lumpuma's Palace, respectively)
- We have spent an excess over USD 500,000 up to now

The Company has various projects with aim to help the local community.
The Company has a full fledged Community Project Coordinator in place for effective implementation.

School at Kapila & Chapula



Primary Medical Facility at Nakana



Farmers at the
Blessing Farms
& Kapila Green
Farms, fully
supported by
Kagem.



Future Plans

- A 2 year plan and budget totalling over US\$ 1,200,000 targeting a host of projects including:
- Conversion of Chapula Basic School into a Secondary School
- Introduction of a “Skills” school in Lufwanyama close to the mine.
- Grading of the rural road between Chief Lumpuma’s region to the current road accesses.
- 3 Nurses Quarters at the Nkana Clinic;
- The 4-ward Building at the Nkana Clinic;
- Construction / Rehabilitation of a Lower Court Building in Nkana Village;
- Erection of a bridge across the Kafubu River;

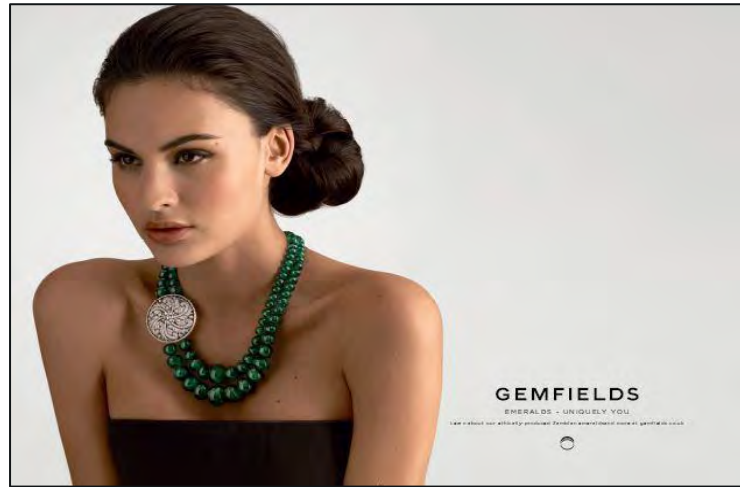
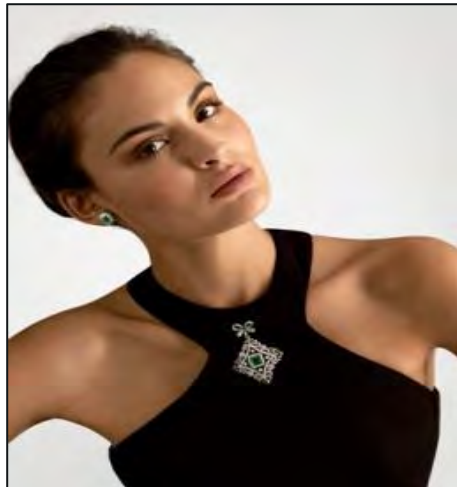
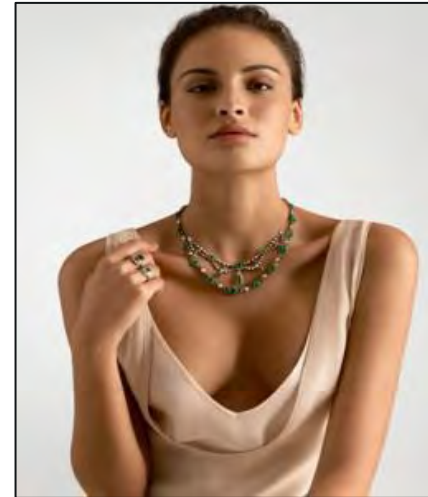
Marketing & Promotion

Our First Advertising Campaign



Global Advertising Campaign

Promoting Zambian Emeralds & Downstream Stakeholders



2013 Advertising Campaign

- Mila Kunis appointed as global brand ambassador
- Mila visited Zambia and Kagem in January 2013
- Subsequent launch event generated tremendous coverage



Marketing Initiatives & Press Coverage



Precious stones for pachyderms

Gemfields' ANNA HEBER talks to SHARMA VERMA about a charity auction featuring jewellery inspired by the elephant. The money is to save the animal's habitat

A mixed, half-Jelly, half-British, woman, Anna Heber, is the face of Gemfields, the world's largest producer of emeralds. She is also the face of a charity auction featuring jewellery inspired by the elephant. The money is to save the animal's habitat.

Anna Heber, Gemfields' spokesperson, is a woman of many talents. She is a model, a designer, and a philanthropist. She is also the face of a charity auction featuring jewellery inspired by the elephant. The money is to save the animal's habitat.

The auction, titled 'GEMS FOR A GIANT', is a collection of specially designed jewellery that is both beautiful and meaningful. The pieces are inspired by the elephant, a symbol of strength and wisdom. The money raised from the auction will be used to support the World Land Trust, a charity that works to protect the world's remaining wild places.

Anna Heber is a woman of many talents. She is a model, a designer, and a philanthropist. She is also the face of a charity auction featuring jewellery inspired by the elephant. The money is to save the animal's habitat.



Sponsored by:



Sotheby's



canaz WEST

SHOWSTUFF



www.wti.org.in

Marketing Initiatives & Press Coverage

BEST BAUBLES

DIVINE DESIGN

Atish Azgar
Khyentse
crafted a unique
Canebox statue
featuring a
600-carat
Zambian emerald
to commemorate
the collection.

GENTLE GIANTS

Top jewellers collaborate with gem
producer GEMFIELDS for the
EMERALDS FOR
ELEPHANTS
collection

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

including a pair of
earrings, a ring
and a bracelet.

Elephant jewellery

[illegible]

Green Elephant in the Room



THIS elephant is graceful, elegant and sparkling, costs more than an elephant and does not weigh a ton. It is also a leading piece in the collection. Entitled for Elephants, created by Martha Fendall for Aztec Khamboro, and set in 18-carat Gemfields' Zambian emeralds. The collection was unveiled by Martha Fendall in Mumbai on July 25. Auctioneer, organized by Sotheby's, will be held at "Big Market House" in Mumbai in October.

The World Land Trust's gemstone mining company, Gemfields, together with Aztec Land Brown and the Gemological Institute of America, have collaborated with 10 of India's top jewelry designers to create a collection using Zambian Emerald jewelry. The design includes necklaces, rings and earrings, all shaped like an elephant.

The exhibition follows the successful Emeralds for Elephants show in London in the summer of 2010, and aims to create precious jewelry fund for the conservation of the Wildlife Trust of India for the Asian Elephant in India.

CA

Zambian Emeralds on the World Stage



PROFESSIONAL
Jeweller
Gemfields record-breaking ethical emerald auction



Outstanding Results for Gemfields Rough Zambian Emerald And Beryl Auction



IN THE LOUPE | EMERALDS

The jewel in Zambia's crown

Zambian emeralds are a natural rich green and cheaper than their Colombian counterparts. Producer Gemfields explains why every jeweller should be selling these precious gems

Professional Jeweller.com

Gemfields brings Zambian emeralds to UK and Europe



WORLD
LAND
TRUST

The green allure of Zambia's ethical emerald mines

Gemfields & Government



FROM MINE TO MARKET



LEAVING AN ENVIRONMENT



FOR THE NATION!