



Pangea DiamondFields plc

AIM: PDF



September 2007

# Pangea DiamondFields plc

## Overview

Africa-focused diamond company with a primary alluvial focus

Near-production projects

Ten projects in four countries:

- One at pilot mining stage
- Three at bulk sampling stage with target of seven by end 2007
- 26 professionals established on site and in four regional offices

## AIM Statistics

**Exchange:** AIM (LSE)

**Symbol:** PDF

**Date of listings:** 17 October 2006

**Current price:** 53p (31 August 2007)

**Shares in issue:** 117m (undiluted)

**Market capitalisation:** £62m (\$125m)

**Cash balance:** US\$15.8m (30 June 2007)



*Local exploration geologist with jig, Dimbi, CAR.*



*Diamonds from Cassanguidi, Angola.*



*Bulk Sampling at Dimbi, CAR.*

## Isle of Man Office

Falcon Cliff, Palace Road,  
Douglas, IM2 4LB

Isle of Man

Tel: +44 1624 63 00 00

Fax: +44 1624 63 00 01

info@pangeadiamondfields.com

## Johannesburg Office

Unit C, Central Park Suites

Cnr Main Street and Orchard Avenue  
Bordeaux, Randburg 2194

PO Box 3968, Randburg 2125

Tel: +27 11 438 4100

Fax: +27 11 886 7020

www.pangeadiamondfields.com



# Pangea DiamondFields plc

## Non-executive Directors

### **Bill Nairn**

*Mining Engineer*

Technical director Anglo PLC (2001 – 2005)

Director: AngloGold, Amplats

40 years mining and mine management

### **Miles Kennedy**

*Lawyer*

Executive chairman Kimberley Diamond Company (ASX)

30 years in mining and mining finance

### **Ashley Dunster**

*Engineer*

Vice President Capital International Research Inc

### **Dewald Joubert**

*Lawyer*

Director Maitland & Co.

## Executive Management

### **Rob Still** BCom; IMM

*Chief Executive Officer*

22 years in mining and mining finance

### **Brett Thompson** BEng (Hons) Mining

*Chief Operating Officer*

23 years including De Beers and AngloGold

### **Anton Esterhuizen** MSc Geology

*Chief Exploration Officer*

30 years Mining Exploration

International recognition

### **Patrick Cooke** CA (SA)

*Chief Financial Officer*

Background as a CFO of JSE listed companies

### **Helen Pein** BSc (Hons) Geology

*Exploration Manager*

20 years experience in exploration

### **Michelle Jenkins** CA (SA); BSc (Hons) Geology

*Finance/Investor Relations Manager*

20 years experience in corporate finance

### **Boris Kamstra** Pr Eng; MBA

*Engineering Manager*

20 years project experience

Directors  
& Managers



# Pangea DiamondFields plc

## Management Track Record



Pilot mining at Cassanguidi, Angola.

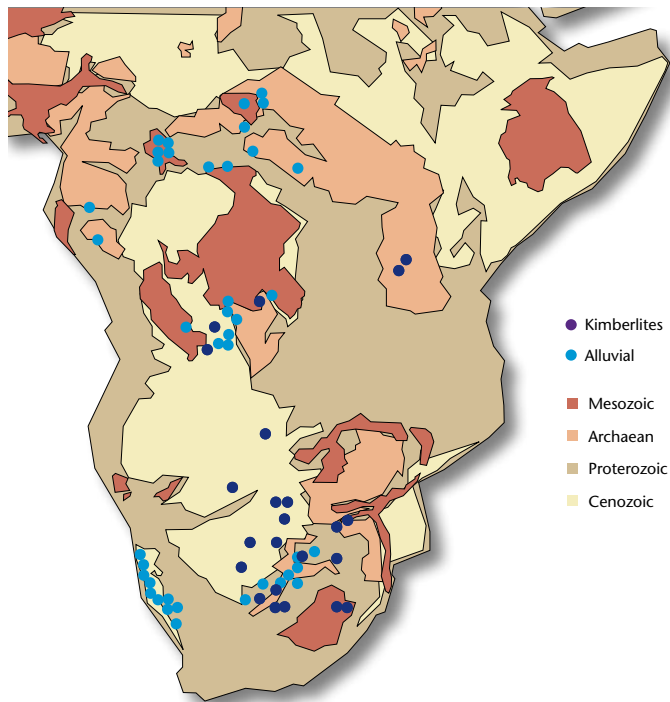
- Discovered by PDF management
- Discovered and evaluated to feasibility stage by PDF management
- Discovered and developed by PDF management
- PDF management played a major role in development

Project	Company	Market	Approx Cap/current
Tanzanian gold	Pangea Goldfields Inc	TSX	C\$200,000,000 (1999)
Zimbabwe Platinum	Zimplats	ASX	A\$1,400,000,000
SA Vanadium	RhoVan	JSE	R3,500,000,000
Manica	Pan African Resources	AIM	£65,000,000
Burnstone	Great Basin Gold Limited	JSE/TSX/Amex	C\$483,000,000
Corridor Sands	Southern Mining Corp	JSE	US\$130,000,000 (2002)
Ruashi copper/cobalt	Metorex	JSE	R7,300,000

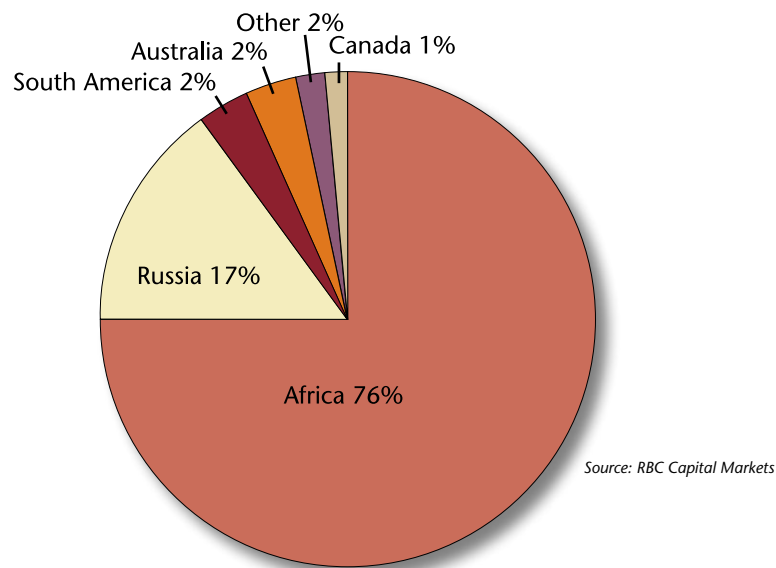


# Location of Diamond Producing Areas in Africa

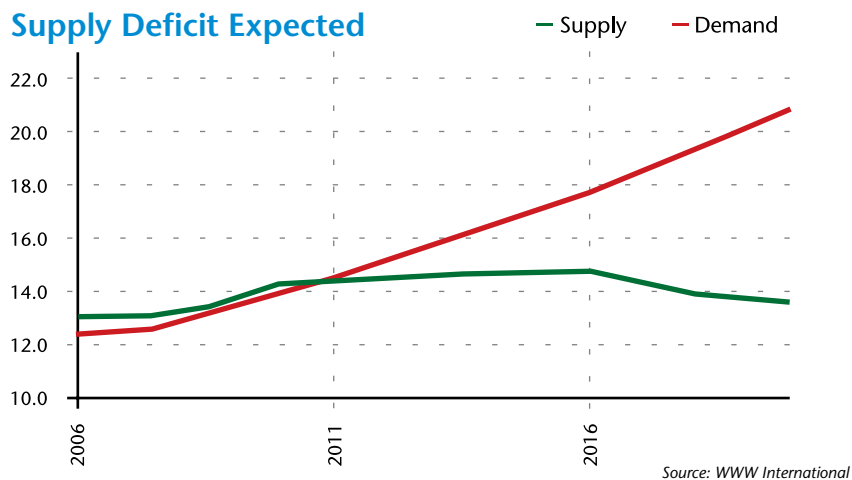
## African Diamond Deposits



## World Diamond Production by Value (2005)



## Supply Deficit Expected



Supply Deficit expected



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## Risk Mitigation Approach

- Phased incremental project development:
  - Reduces investment risk
  - Reduces technical risk
  - Reduces geological risk
- Without major impact on economy of scale benefits

## Confidence and risk mitigation process

PHASE 1	PHASE 2	PHASE 3	MINING Module 1	MINING Module 2,3,4,
US\$ 1,5m	US\$ 3,5m	US\$ 2,5m	US\$ 5,0m	US\$ 8,0m each
Exploration	Bulk Sampling	Pilot Mining	Modular Mine Development	

Decreasing Risk  
Increasing Confidence

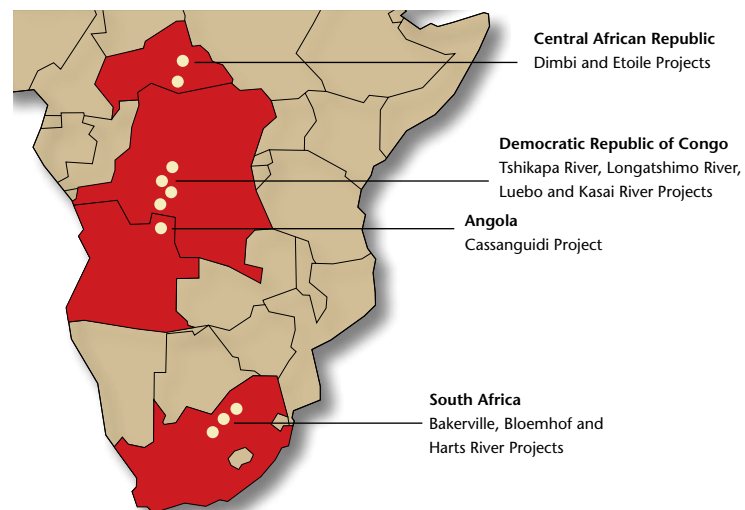


Bulk Sampling, Harts River, South Africa.



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## Project Summary



Washed gravels being dewatered, Cassanguidi, Angola.

RISK  
mitigation

Country	Project Name	Pangea DiamondField's Effective Interest* (%)	Development Status
Angola	Cassanguidi	33	Pilot Mining
Central African Republic	Dimbi	90	Bulk Sampling
	Etoile	90	Reconnaissance
Democratic Republic of Congo	Tshikapa River	100-60	Advanced Exploration
	Longatshimo River	80	Advanced Exploration
	Luebo	85	Exploration
	Kasai River	85	Reconnaissance
South Africa	Patsema	74	Bulk Sampling
	Harts River	74	Bulk Sampling
	Bloemhof	74	Advanced Exploration

\* Subject to variation in terms of 3rd party participation rights and exercise of options

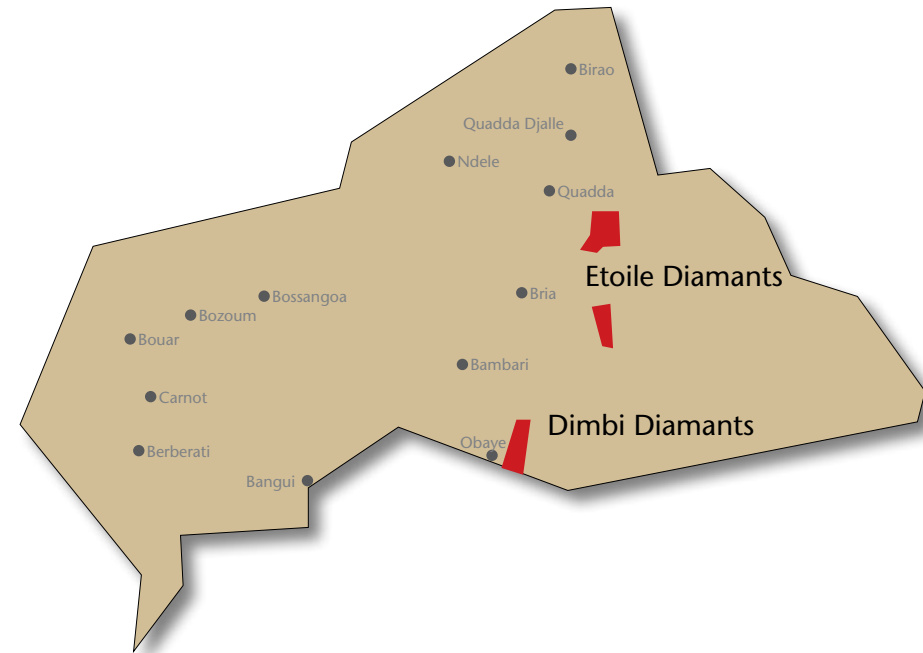


## Central African Republic



### Projects

- Two projects with mining conventions
  - Dimbi
  - Etoile
- Established artisanal diamond production
- To date primary source of diamonds unknown
- New mining code
- Pangea DiamondFields one of few diamond companies exploring
- Highly prospective yet relatively underexplored



Diamonds from Dimbi valuation parcel.

## Central African Republic

### Etoile Project

- Located in Mokka Quadda region of eastern Central African Republic along Kotto River
- Exclusive artisanal activities
- Three lease areas within Etoile Project
  - Nzako 922 km<sup>2</sup>
  - Kotto-Bangana North 988 km<sup>2</sup>
  - Kotto-Bangana South 962 km<sup>2</sup>
- Field camp established
- Reconnaissance exploration in progress



*Aerial view of part of Etoile Project area.*



*Artisanal work at Nzako exploration area, Etoile Project.*



*Lamprophyre pit, Dimbi Project.*



*Bulk Sample Site II, Dimbi.*

Mokka  
Quadda  
region



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## Central African Republic

### Dimbi Project

- \$3.2m spent on plant and equipment, commissioned January 2007
- Diamonds being recovered
- Valuation parcel of > 3,000 carats produced
- Large tonnage
- Initial indicative recovered grades > 0.4 cts/m<sup>3</sup>
- Area selected from satellite image – river capture
- Geological settings for diamond deposition
  - *Primary*
    - Mantle-derived potential source rocks discovered
  - *Secondary*
    - Paleo Kotto river
    - Dimbi Formation
    - Dimbi Formation tributaries
- Bulk sampling well advanced
- 100 operational staff onsite

Gravel Formation	Estimated Volume (m <sup>3</sup> )
Mbia (Paleo Kotto) River	15,000,000
Dimbi Formation	57,500,000
<b>TOTAL</b>	<b>72,500,000</b>

per CPR June 2006



*Dimbi plant in operation.*



*Stripping of overburden and tractor-mounted auger delineating extent of gravels, Dimbi.*



# Central African Republic

## Dimbi Project – Geology



Satellite image of Dimbi Project area.



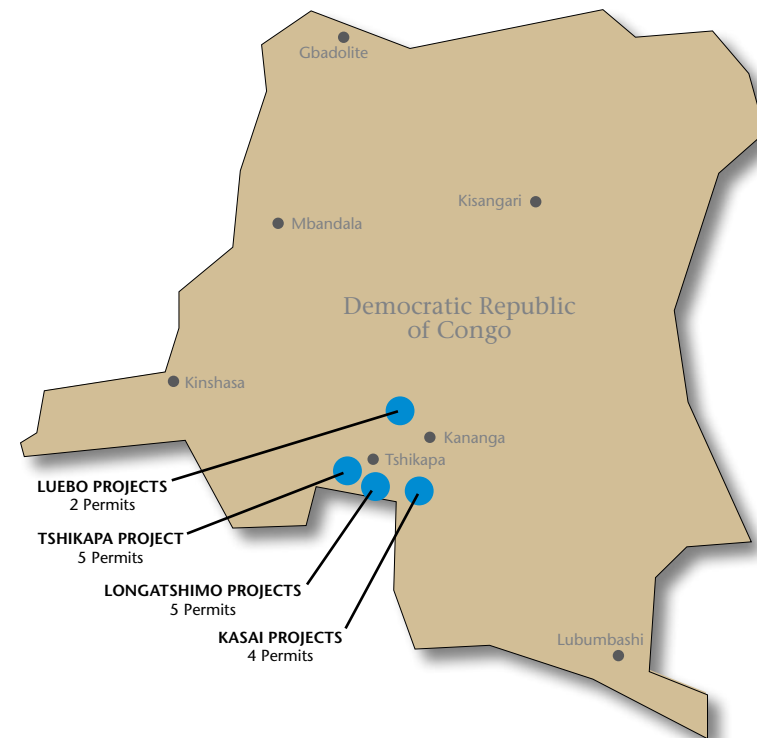
Geological map of Dimbi Project area.

>3,000  
carats

## Democratic Republic of Congo



- Pangea DiamondFields established in Kinshasa and Tshikapa
- Two advanced field camps established in Kasai Region
- Good resource potential established from detailed pitting and field mapping
- Four project areas
  - **Tshikapa River Project**  
Five licence blocks  
Advanced Exploration Phase including mapping and pitting of various terraces, completed  
Bulk Sampling to commence 2008
  - **Longatshimo River Project**  
Five licence blocks  
Exploration Phase completed  
Initial Bulk Sampling Equipment en route  
Bulk Sampling to commence end Q4 2007
  - **Luebo Project**  
Two large prospecting licences  
Reconnaissance work completed on River terraces  
Target Areas delineated from field work and historical data study
  - **Kasai River Project**  
Four prospecting licences  
Early initial reconnaissance work conducted
- New Project Acquisition
  - Regional research in Kasai Occidental Province resulted in areas of interest identified
- Pangea DiamondFields pioneered new road access to DRC

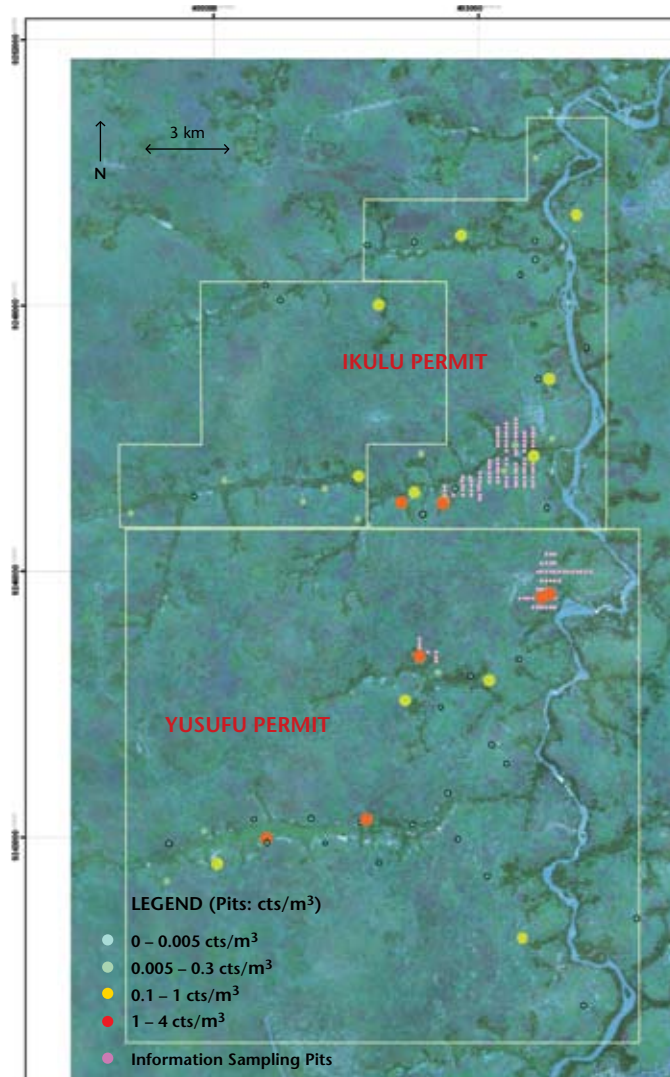


Convoy of bulk sampling equipment en route to DRC.



# Democratic Republic of Congo

## Longatshimo River Project



Longatshimo River Project Pit positions.

- Bulk Sampling to commence Q4 2007
- Advanced exploration complete
- New properties added in 2007
- Bulk Sampling equipment purchased and en route to project site
- Plant site preparation for Bulk Sampling in progress



Convoy of Bulk Sampling equipment en route to DRC.

Convoy  
en route

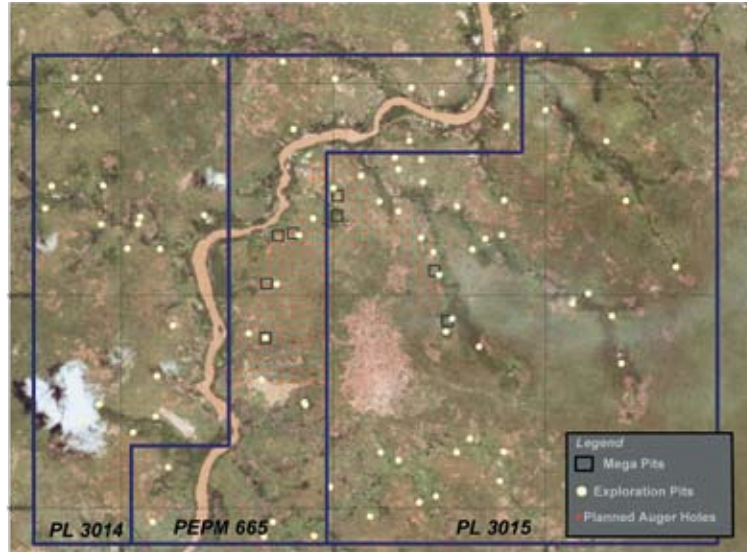


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# Democratic Republic of Congo

## Tshikapa River Project



Permits 3014, 665, 3015



Tshikapa River.



Jigging samples, Tshikapa River Project.

- 5 licence areas
- Bulk Sampling in 2008
- Advanced exploration complete
- New properties acquired in 2007



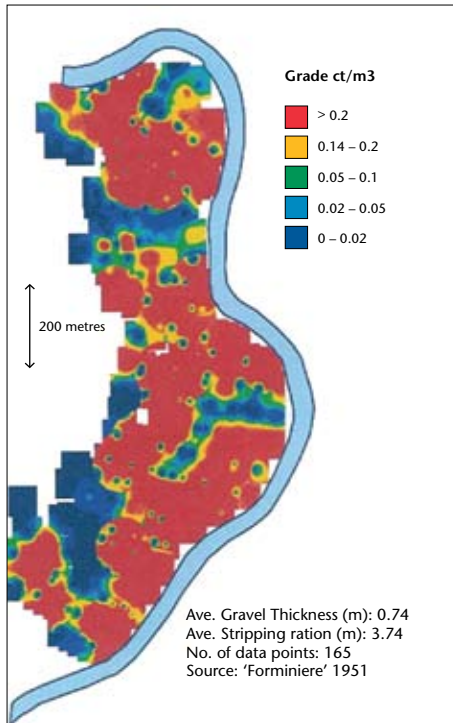
# Democratic Republic of Congo

## Luebo and Kasai River Projects

- Luebo Project – reconnaissance exploration complete
- Kasai River Project – reconnaissance exploration in progress

### Luebo Project, Kambangala Resource Area

Area	AREA	Ave. Thickness	Tonnage	Ave. Grade	CARATS
	m <sup>2</sup>	m		ct/m <sup>3</sup>	
Kambangala	157,600	0.74	233,248	0.71	82,803



Kambangala area – an example of historical data available.



Satellite image of Luebo Project area.



Luebo airstrip.



Kasai River exploration.

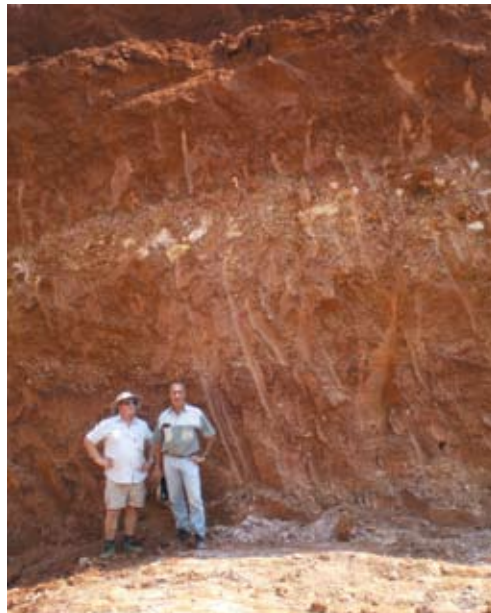
Historical  
Data

# Angola

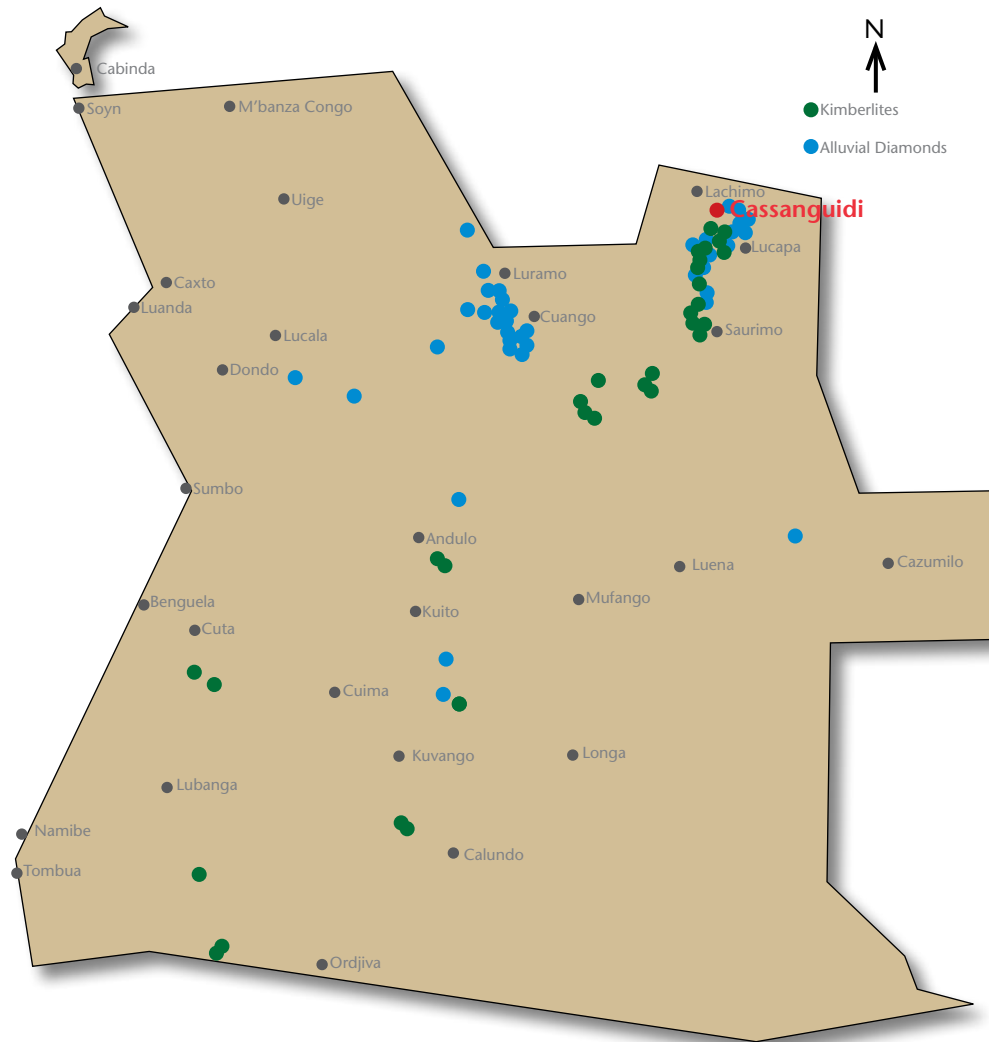


## Cassanguidi Project

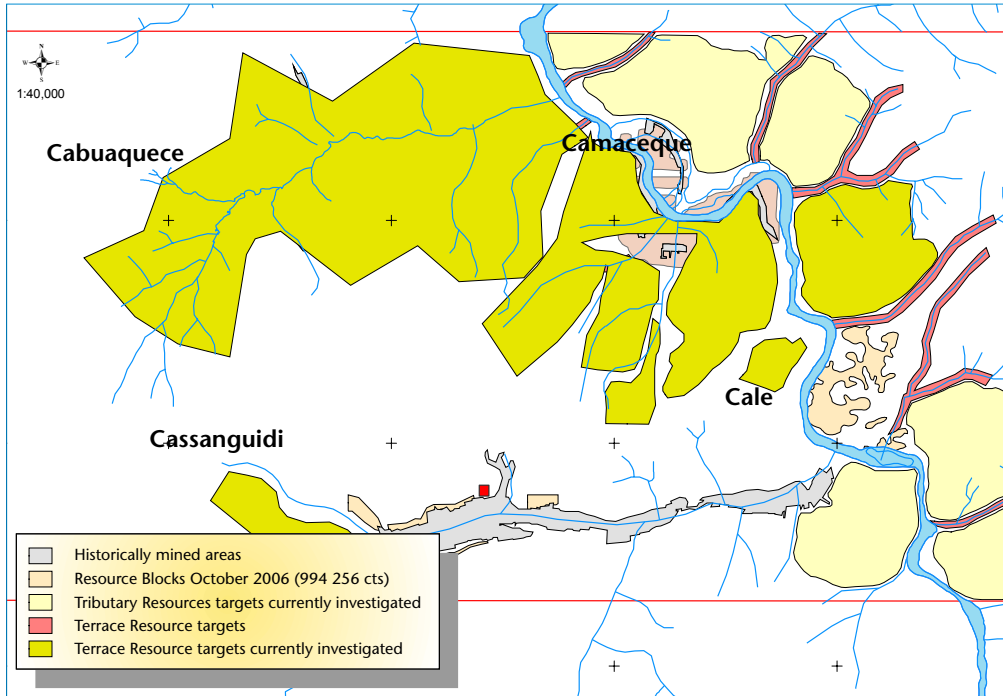
- 33% indirect interest
- One of only two 'old order' rights in the country
- Extensive historical data and verified resource
- Pilot mining in progress 15,000m<sup>3</sup>/month
- Current monthly production 3,000 – 4,000 ct/month
- Sales through Sodiam – under negotiation
- Expansion opportunities being investigated



Management inspecting diamondiferous gravels in pit, Cassanguidi.



# Angola



Extracting diamondiferous gravels from pit, Cassanguidi.



Mess tent, Cassanguidi.

>3,000  
ct / month



Staff accommodation, Cassanguidi.



Cassanguidi diamonds.



Scrubber, Cassanguidi.

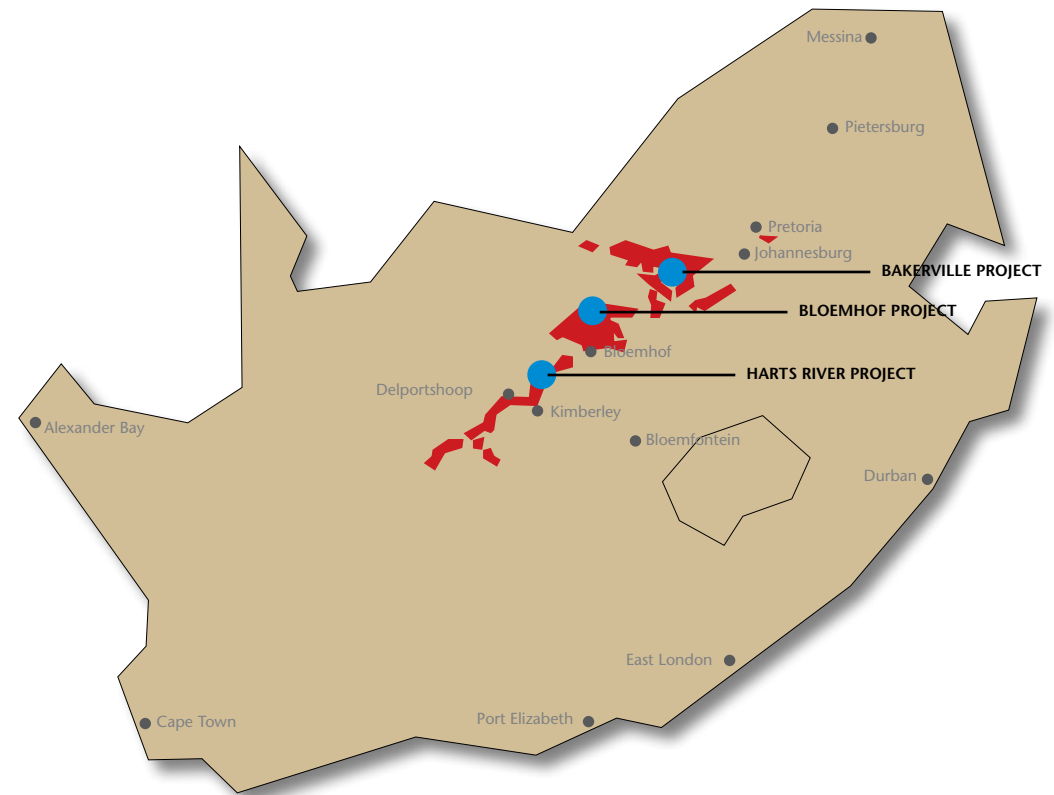


## South Africa



### Projects

- Historically a major producer with established mining infrastructure and expertise
- Still many unexploited opportunities
  - Previously sterilised and highly prospective ground made accessible by legislation changes
  - Application of modern exploration techniques identified potential new targets under Kalahari cover



Commissioning of Bakerville Plant.



# South Africa

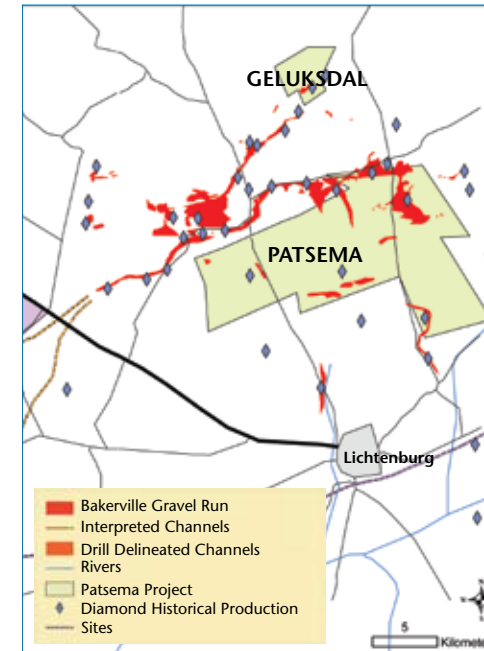
## Bakerville Project

- Diamond rush in 1926–1928
  - Declared production: 7.5 Mct
- Two distinct project areas:
  - Patsema
    - Potential extension of high grade historical potholes and gravel runs
  - Geluksdal
    - Kimberlite/pothole target
    - Trap sites identified from Patsema run extensions
- High potential extensions to historical production areas sterilised until legislation changes in 2004 provided access to properties
- 20tph DMS (Dense Medium Separation) in area used for processing gravels
- 2,5m diameter Bauer BG36 Large Diameter Drill rig contracted for use for Bulk Sample generation



Commissioning of the Dense Medium Separation (DMS) plant, Bakerville plant.

## Location Map



Scrubber and plant, Bakerville.

7,5 Mct  
produced  
historically



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## South Africa

### Patsema Area – Zamenkomst and Geluksdal Potholes

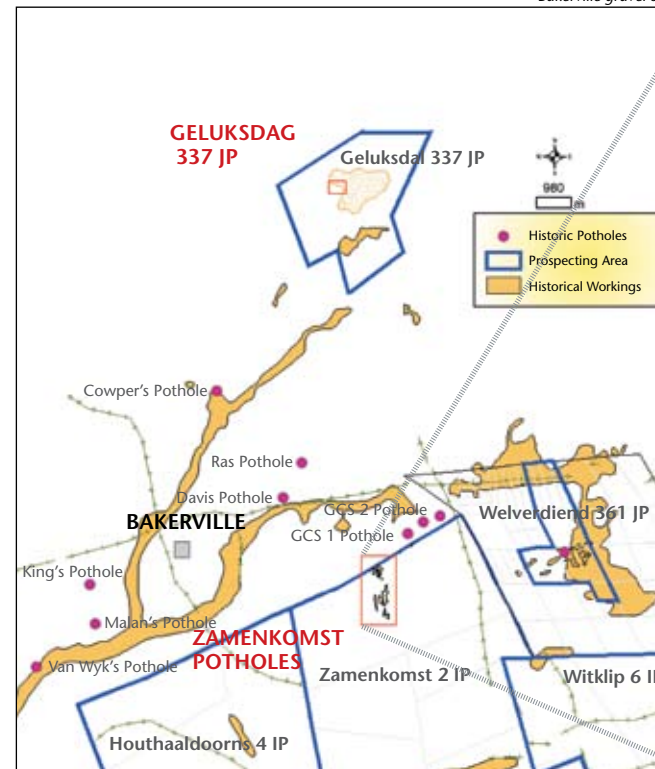
- Ground gravity survey on portion of one farm completed – runs plus ten potential potholes identified
- 415 holes drilled to test target sites
- Four distinct pothole structures containing significant gravel resources confirmed with drilling to date
- < 10% of Patsema area investigated to date
- Historic diamond grades
  - 'runs' at 5ct/100t
  - potholes up to 500ct/100t
- 19 Bauer rig large diameter drill holes completed
- Bulk Sampling plant on site treating gravel



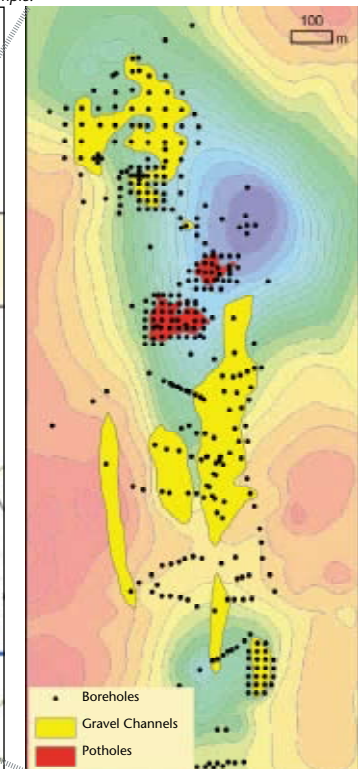
Bakerville gravel sample.



Commissioning of Bakerville Bulk Sampling plant.



Bakerville Project location map.



Gravity image and drill delineated gravel potholes and runs.



# South Africa

## Patsema



Patsema Bauer rig large diameter drilling, Patsema.



Patsema drilling.

## Geluksdal

- Commenced as kimberlite target based on detailed aeromagnetic survey
- Phase 1 drilling identified substantial gravel resource in pothole structure
- Large pothole structure delineated (3m tons)
- 5 Bauer rig large diameter drill holes completed
- Gravels recovered to be treated at Zamenkomst plant site



Malan's Pothole, Patsema.

19 Bauer rig  
LDD  
holes

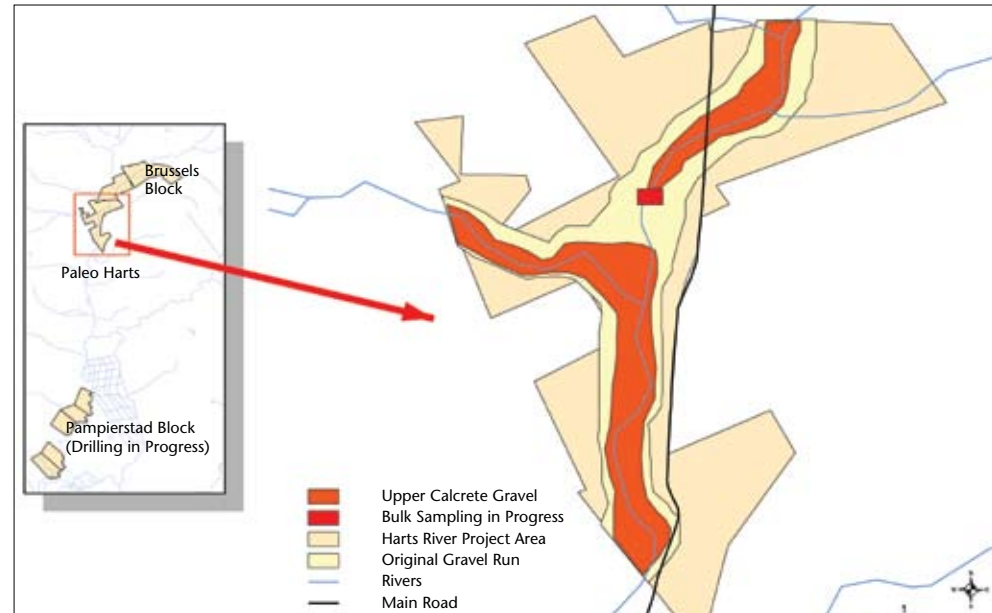


## South Africa

### Harts River Project

- 250km paleo-river gravel deposit, overlooked /sterilised in the past
- \$1,500/ct diamond value
- Three year investigation to understand geological control on diamond deposition:
  - 1st phase Bulk Sampling – complete*
    - Focus on Brussels area
    - Drilled 694 boreholes, totaling 6,870m
    - 600,000 tons sampled
  - 2nd phase Bulk Sampling – ongoing*
    - Objective: delineation of high grade pay areas within deposit

### Phase 2 Bulk Sampling



### Bloemhof Project

- Contract miner to undertake Bulk Sampling activities



Pan plants, Harts River



Bulk Sampling, Harts River

# Pangea DiamondFields plc

10  
projects



*Cassanguidi diamonds.*

## Conclusion

- Pangea DiamondFields has good solid base of ten alluvial diamond projects at various stages in exploration process
- Pangea DiamondFields has resources, expertise to develop them to mines
- Portfolio has potential to bring significant value to shareholders
- The success of any one of the projects underpins the current market capitalisation



*Tshikapa diamonds.*



*Dimbi diamonds.*



*Harts River diamonds.*



### **Isle of Man Office**

Falcon Cliff, Palace Road,  
Douglas, IM2 4LB

Isle of Man

Tel: +44 1624 63 00 00

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[info@pangeadiamondfields.com](mailto:info@pangeadiamondfields.com)

### **Johannesburg Office**

Unit C, Central Park Suites  
Cnr Main Street and Orchard Avenue  
Bordeaux, Randburg 2194

PO Box 3968, Randburg 2125

Tel: +27 11 438 4100

Fax: +27 11 886 7020

[www.pangeadiamondfields.com](http://www.pangeadiamondfields.com)