

## VISION

KB-MIC's vision is to develop and maintain a position as the distinguished geological consultancy of choice for both our employees and clients. Our focus will be primarily on Green and Brown field exploration in Africa.

We are considered "Competent Persons" by internationally recognized resource reporting standards (SAMREC, Ni43-101, and JORC) for Coal, Gold and Platinum Group Metals. Other commodities related experience includes Uranium, Copper, Iron-ore and Manganese.

## CORE COMPETENCIES

KB-MIC's competitive advantage lies in its ability to offer clients integrated services from target generation through to CPR documentation for public companies.

- ➔ Geological Exploration
- ➔ Resource Modeling
- ➔ Mineral Economics and Evaluations
- ➔ Mineral Policy and Development Economics
- ➔ Geotechnical and Engineering Geology

## Geological Exploration

Paths of exploration and discovery are followed by Geoscientists of today in search of solutions to some of society's most challenging problems. KB-MIC offers a wide range of exploration services with core strengths in geological mapping and interpretation, which are vital for any exploration programme.

### Services Include:

- ➔ Literary Reviews
- ➔ Geological Mapping
- ➔ Structural Interpretations
- ➔ Whole Rock and Sediment Sampling
- ➔ Geochemical Data Interpretation
- ➔ GIS
- ➔ Design Drilling Programme
- ➔ Drill Rig Management
- ➔ Core logging, sampling and database management
- ➔ Project management and administration of Green and Brown Field exploration programs

## Resource Modeling

KB-MIC offers the full spectrum of digital geological modeling services, from database validations and QAQC compliance through to resource classification and tabulations. All of the above are to international public reporting standards. Our software of choice is Datamine Studio™.

### Services Include:

- ➔ Electronic database design and configuration
- ➔ Implementation of an independent QAQC program
- ➔ Database validation and verification
- ➔ 3-D geological and structural modeling
- ➔ Data analysis and geostatistics
- ➔ Geostatistical resource estimation techniques
- ➔ Grade variability studies, using conditional simulation techniques
- ➔ Resource classification, tabulations and reconciliations
- ➔ Independent audits and reviews
- ➔ Risk Assessment
- ➔ Preparation of technical reports and 'Competent Person's Report' for public companies



### Mineral Economics

Mineral economics is the study of the business and economic aspects of natural resource extraction and use. More recently this definition has been incorporating aspects of sustainable development in the minerals industry. Mineral economics involves studying topics in economic and financial analysis that are developed to meet the special needs of the mineral resources industries.

#### Services Include:

- ➔ Market surveys for mineral products
- ➔ Country reports
- ➔ Mineral valuations
- ➔ Project identification for investors
- ➔ Commodity Analysis

### Mineral Policy and Development Economics

Resource development decisions will impact society for generations to come. Therefore it is important that governments implement sound policies to strengthen sector governance and enable economic growth. KB-MIC also undertakes strategic regional mineral scans. These studies highlight resource potential, infrastructure requirements, and advantages of ordered development and clustering of projects. These studies also provide preliminary economic analysis and identify downstream development opportunities. KB-MIC uses an analytical methodology that takes a spatial view of a region, identifying potential anchor projects and a supporting spine that can be built upon the region's natural endowments. These can then act as a catalyst for the development of other mineral, tourism and agricultural projects.

#### Services include:

- ➔ Mineral scans
- ➔ Policy impact assessments
- ➔ Input into mineral policy development
- ➔ Strategic mineral resources reviews
- ➔ Identify policy directions to facilitate cluster development
- ➔ Map economic clusters and upstream economic linkages
- ➔ Develop solutions to facilitate the sustainable development of input industries supplying the minerals industry

### Geotechnical and Engineering Geology

KB-MIC offers a wide range of geotechnical services that are critical to any major infrastructural development. Our core strengths are in geotechnical mapping, soil profiling and interpretation.

#### Services Include:

- ➔ Preliminary geotechnical investigations
- ➔ Regional geotechnical mapping
- ➔ Geotechnical core logging
- ➔ Engineering geology
- ➔ Soil Profiling
- ➔ Assessments of potential development zones

## Working together to unlock our continent's mineral resource wealth.

Our company has a Black Economic Empowerment (BEE) status and as such your procurement spend on our services can be attributed to your company's Measured Procurement Spend. For further information please refer to the B-BBEE Codes of Good Practice promulgated in terms of Section 9(1) of the B-BBEE Act, 53 of 2003.

**Physical Address:** 4 Rutland Avenue, Arena House, Craighall, 2196, Gauteng , South Africa

**Postal Address:** P.O. Box 41955, Craighall, 2024,

**Tel:** +27 11 326 0112 **Fax:** 086 545 2720

**Cell:** +27 82 554 4784 **Cell:** +27 83 537 0052

**www.kaibatla.co.za**

## Brief Curriculum Vita of Key Staff:-

### Dr Avinash Bisnath

#### Summary of experience

Avinash Bisnath is a co-founding member Kai Batla Holding Pty Ltd and its subsidiaries. He graduated with a BSc. (Hons) in Geology from the University of KwaZulu Natal (former University of Durban-Westville) in 1997. He took up a position as a Mine Geologist with Vaal Reefs, AngloGold from December 1996 until mid-1998 thereafter returned to UKZN to read towards a M.Sc. and graduated with the M.Sc (Geology) in 2001. He was then appointed as a Lecturer in the Department Geology, UKZN where he lectured for a total of three years. In 2001, he also got involved with the South African National Antarctic Programme (SANAP) and subsequently spent two field seasons down south doing fieldwork as part of a Ph.D. which was awarded in 2006. In 2007 and 2008 he also served as the Geoscience delegate to the South African National Committee for Scientific Committee on Antarctic Research (SCAR). Avinash joined the Council for Geoscience in 2005 and was actively involved in a World Bank funded project mapping crystalline basement rocks in parts of Madagascar. In 2007 he joined Caracle Creek International Consulting (CCIC). At CCIC he has been actively involved in project management of green and brown fields exploration, both nationally and internationally. Avinash has extensive experience in regional geological mapping.

#### Areas of expertise

- Geological field mapping
- Structural mapping and interpretation
- Metamorphic petrology
- GIS
- Project management of green and brown fields exploration programmes

#### Qualification and memberships

- Bachelor of Science (Geology & Economic Geology) – University of KwaZulu Natal
- Honours Bachelor of Science (Geology) - University of KwaZulu Natal
- Master of Science (Geology) - University of KwaZulu Natal
- Doctor of Philosophy (Geology) – University of Cape Town
- Introduction to ArcGIS & Brining your data into ArcGIS - GIMS Midrand, Gauteng
- Geoscience delegate to the South African National Committee for Scientific Committee on Antarctic Research (SCAR)
- Member of the Geological Society of South Africa (MGSSA) Member of the South African Council of Natural Scientific Professions (SACNASP), Pri.Sci.Nat.
- Member of the Black Managers Forum (BMF)

## Brief Curriculum Vita of Key Staff:-

### Sodhie B Naicker

#### Summary of experience

Sodhie B Naicker is a co-founding member Kai Batla Holding Pty Ltd and its subsidiaries. Sodhie has more than 11 years experience in the mining and minerals field. His key area of expertise lie in the technical elements of mining and minerals related evaluation of projects. Mr Naicker has worked both in Africa and Australasia. His project experience ranges from exploration, mining, quality control, laboratory management, marketing and sales, and techno-financial evaluations of mining projects. His experience in the mining industry is complemented by his more recent focus on economics and policy formulation in the minerals industry.

Sodhie obtained his basic training as a geologist within the Anglo American Group after completing his Honours degree in Geology at the University of Durban Westville (now University of Kwa-Zulu Natal) in 1996. Sodhie spent 2.5 years within the Anglo Coal division starting off as a graduate geologist and eventually leaving the Anglo Group after working on several exploration projects. Sodhie then joined the SGS Group and held various positions over a 5 year period both locally and internationally. After leaving SGS in 2004, Sodhie was appointed as Advisor in a minerals consultancy in South Africa. Prior to joining Kai Batla Minerals Industry Consultants Sodhie managed the Minerals Economics and Strategy Unit at Mintek for 3 years.

#### Areas of expertise

- Laboratory methods and techniques
- The valuation and strategic analysis of mining companies and mineral projects;
- The due diligence of techno-economic information relating to mineral projects;
- Coal geology;
- Independent reporting of quality and quantity; and Independent Sample Trail Audits (STA).
- International Reporting Codes for Mineral Resources.

#### Qualification and memberships

- Bachelor of Science (Geology & Economic Geology) – University of KwaZulu Natal
- Honours Bachelor of Science (Geology) - University of KwaZulu Natal
- Member of the Geological Society of South Africa (MGSSA)
- Member of the South African Council of Natural Scientific Professions (SACNASP), Pri.Sci.Nat
- Member of the South African Institute of Mining and Metallurgy (MSAIMM)
- Member of the Australian Institute of Mining and Metallurgy (MAuSIMM)

## Brief Curriculum Vita of Key Staff:-

### Siphelele Buthelezi

#### Summary of experience

Siphelele Buthelezi graduated with a BSc. (Hons) in Geology from the University of KwaZulu Natal in 2006. She took up a position as Mapping Geologist at the Council for Geoscience in 2007 where she was involved in various projects which involved regional geological mapping of a wide spectrum of South Africa geology. She joined Kai Batla Minerals Industry Consultants as an Exploration Geologist in 2008.

#### Areas of expertise

- Geological field mapping
- Structural mapping and interpretation
- GIS

#### Qualification and memberships

- Bachelor of Science (Geology) – University of KwaZulu Natal
- Honours Bachelor of Science (Geology) - University of KwaZulu Natal
- Introduction to ArcGIS & Bringing your data into ArcGIS - GIMMS Midrand, Gauteng
- Member of the Geological Society of South Africa (MGSSA)
- Member of the South African Council of Natural Scientific Professions (SACNASP), Cand.Sci.Nat.
- Member of the Golden Key Honourary Society

## Brief Curriculum Vita of Key Staff:-

### Candice Willard

#### Summary of experience

Candice Willard graduated with a BSc. (Hons) in Engineering and Environmental Geology from the University of KwaZulu-Natal (former University of Natal) in 2003. She joined the Council for Geoscience in February 2004 where she was involved in detailed 1:10 000 scale geotechnical mapping, for the production of 1:50 000 scale maps, with emphasis around growth points such as Osizweni, Verulam and the Durban – Pietermaritzburg N3 freeway corridor. She has also carried out numerous geotechnical investigations, assessments and development potential zonation mapping for development projects throughout KwaZulu-Natal.

#### Areas of expertise

- Regional geotechnical mapping
- Preliminary geotechnical investigations
- Soil profiling
- GIS

#### Qualification and memberships

- Bachelor of Science (Geology) – University of KwaZulu Natal
- Honours Bachelor of Science (Engineering and Environmental Geology) - University of KwaZulu Natal
- ACRU Agrohydrological System, South African Institute of Agricultural Engineers, KwaZulu-Natal Branch, at the University of KwaZulu-Natal Pietermaritzburg
- Geotechnical Core Logging and Soil Profiling, South African Institute of Engineering and Environmental Geologists, at the University of KwaZulu-Natal, Durban
- Introduction to Geographic Information Systems (GIS), GIMMS, at the Benjamin Hotel, Durban
- Advanced Geographic Information Systems (GIS), GIMMS, at the Benjamin Hotel, Durban
- First Aid Training: Emergency Level, St John, Pietermaritzburg
- Associate Member of the South African Institute of Engineering and Environmental Geologists (SAIEG)
- Member of the South African Council of Natural Scientific Professions (SACNASP), Pri.Sci.Nat.