

Company Profile

Reg. No.: 2007/171669/23

Contact Details: Head Office (Pretoria)

Cell: 082 932 8465 Fax: 086 516 8363

Physical Address (Head Quaters and Geuteng Branch):

2 Devereux Place Philip Nell Park Pretoria West 0183

35 Woltemade Street Culemborgpark Randfontein 1759

Postal Address (Head Office):

P O Box 1910 Silverton 0127

Coordinates - Randfontein: 26°10'27,52"S 27°41'25,06"E

E-mail: thokageo@gmail.com or tshwarom@thokageo.co.za

Website: www.thokageo.co.za

Contact Details: Limpopo Office

Physical Address (Limpopo):

10 Kruger Street Mokopane 0601

Postal Address (Limpopo):

P O Box 67608 Legolaneng Groblersdal 0470

BACKGROUND

Thoka Georsciences CC¹ is a well established company offering a range of services in the fields of project management, engineering geology, rock engineering, geotechnical engineering, civil engineering, geological studies, land surveying, mineral exploration and exploitation (mining). Thoka Georsciences CC was founded in the year 2006 and registered in the year 2007. It deals with all aspects of engineering, land surveying and geology as stated above. It is a close corporation whose roots initially rooted in conducting geotechnical investigations. Through consultation with fellow entrepreneurs in the built environment and mining, the company has seen growth to become a multi-discipline service provider. The company offers professional expertise and experience in the engineering, quantity surveying and geological fields and is deeply committed to sustainable development in South Africa and Africa as a whole. The close corporation is employee owned and managed. Thoka Georsciences cc's shortened name version is ThokaGeo.

VISION

Thoka Georsciences CC's vision is to contribute to the survey, project management and civil engineering sectors, mining and geological fertenity in Africa in line with the vision and principles of the New Partnership for Africa's Development (NEPAD). Our aim is to utilize the opportunities afforded by Accelerated and shared growth initiative for South Africa (AsgiSA) programme in South Africa and NEPAD in Africa while at the same time forming strategic partnerships with other companies in South Africa and Africa as a whole.

MISSION

Thoka Georsciences CC's mission is to be the preferred provider of specialist land surveying, project management, engineering and geological services in South Africa and in Africa at large by bridging the gap between small-scale companies and advanced profit driven development and mining companies while engaging with all the stakeholders in these fields and contributing to sustainable development for all.

ThokaGeo Page 1 of 15 2014/12/15

¹ CC – Close Corporation.

SERVICES OFFERED

Geosciences:

- * Reconnaissance and feasibility studies for mining, dams, reservoirs and weirs
- Application for rights to the DMR
- Commodity exploration (brown and green fields) and exploitation
- Siting and logging boreholes (Soil profiling, core and chip logging)
- Underground, in-pit and surface geological and geotechnical mapping
- Ore grade monitoring and control
- Ore-body modelling and facies interpretation
- Ore reserve classification and estimation
- Short and long term mine production planning
- Mining methods and mine support designs
- Geotechnical investigations for property (residential and commercial), roads, power stations, pipelines, townships, etc.
- Quality Assessment, Quality Control, Quality Assurance
- Geohydrology
- Training and site supervision
- Investigations for construction materials
- Geophysical data analysis
- Dam safety inspections and geological studies
- Dolomite stability investigations
- Engineering geological studies for housing, roads, waste disposal, graveyards, commercial etc.

Other Professional Services:

- Forensic investigation on engineering structures
- * Report (Peer) Reviews
- Inspections and Quality Control
- Project Management
- Civil and Structural Engineering
- Land Surveying

Other Services:

- Geotechnical / Geological Drilling (Percussion and Reverse Circulation) includes Groundwater Drilling
- ❖ Plant Hire (TLBs, Drop Sides, 16 ton Recovery Truck)
- Construction
- Building Renovations
- Property Rentals
- Sinkhole Rehabilitation

COMPUTER SOFTWARE KNOWLEDGE

Listed below are some of the softwares used on our projects:

- Microsoft Word, Excel, Access, PowerPoint, Outlook, Visio, Projects
- Canvas X
- dotPlot (profile plotting)
- ArcGIS, Planet GIS (Geographic Information System)
- Diggs
- ArchiCAD and AutoCAD
- ❖ JBlock (mine stability modelling)
- Minex
- Micromine
- GBIS
- Gemcom (ore body modelling)
- Strand7 (finite element analysis)
- Essential Microstation 2004
- ❖ Sable Data Warehouse
- ❖ Google Earth Pro
- Civil Designer
- Ally CAD
- Easy Surv

STAFF REGISTRATION WITH PROFESSIONAL BODIES

Detailed below are some of the regulatory bodies that we are registered with:

- Geological Society of South Africa (GSSA)
- South African National Institute for Natural Scientific Professionals (SACNASP)
- ❖ South African Institute for Environmental and Engineering Geologists (SAIEG)
- ❖ South African Institute for Rock Engineers (SANIRE)
- South African Institute of Mining and Metallurgy (SAIMM)
- ❖ South African Institute of Civil Engineers (SAICE)
- Engineering Council of South Africa (ECSA)
- Operations Research Society of South Africa (ORSSA)
- South African Council for Professional and Technical Surveyors (PLATO)
- The South African Geomatics Institute (SAGI)

COMPANY ACCREDITATIONS AND REGISTRATIONS

Thoka have professional accrediations and registration with the following organisations:

- ❖ Quality Management Systems (QMS) ISO9001-2008
- Occupational Health and Safety Management Systems (OHSAS)
 ISO18001-2007
- Environmental Management Systems (EMS) –ISO14001-2005
- National Home Builders Registration Council (NHBRC) both as professional service provider and as builders
- ❖ Broad Based Black Environmental Empowerment (BBBEE) Level 3
- Construction Industry Development Board (CIDB)
- ❖ Professional Indemnity Insurance (PI) R10m

TRAINING AND CONSULTATION

We provide training and consultation in fields listed under "Services Offered"

SOME OF COMPLETED & CURRENT PROJECTS

Thoka Geosciences is a well established company with a lot of expertise gained through vast experience by its members. Some of the few past projects are listed below.

All projects were and will always be conducted in line with high level relevant industry standards. The descriptions and recommendations are factual and scientific in nature. In addition, all housing related projects meet NHBRC² standards and in-case of the Department of Housing subsidy linked projects, the minimum requirements as required by the GFSH³-2 and 6 are applied.

Economic Geology (Mining)

Application for Prospecting and Exploration Rights for vatious commodities including Coal, PGE's Diamonds, Precious stones, etc. The farms applied for were based in Limpopo, Mpumalanga, North West and Northeren Cape.

Application for Mining Rights for vatious commodities including Coal, PGE's Diamonds, Precious stones, etc. The farms applied for were based in Limpopo, Mpumalanga and North West..

Preparation of EMP's for Mining Projects.

ThokaGeo Page 4 of 15 2014/12/15

_

² NHBRC – National Home Builders Registration Council.

³ GFSH – Green Fields Subsidy Housing document published by the Department of Housing.

Conducting of feasibility studies (exploration) for various commodities in South Africa and Zimbabwe.

Advise communities and land owners as to legislative requirements and potential commodities in their areas.

Below are some of the project areas:

Witbank 209IS, Brest 332MS, Rietspruit 507IS, Kleinwaaihoek 504, Brandewijns kuil 250, Daamplats 259, Canton 319, De Wittekrans 218IS, Fanie 578MS, Raafs South (Zimbabwe), Graaspan 222, Malapchani 659MS, Sitapo 690MS, Thurso 619MS, Longden 312, Margate 544MS, Blesboklaagte 296JS, Braakspruit 407IS, Deonberg 126MT, Du Toit 563MS, Goedehoop 324IT, Graspan 222IS, Liberton 298MS, Swelpan 245LQ, Qualipan 655MS, Schoongezicht 218IR, Schoonoord 230MS, Uitvalgrond 416JQ, Voorhout 310MR, Longden 312MR, etc.

Engineering Geology / Geotechnical Engineering

Project Location: Vhembe District, Limpopo Province.

Objective: Investigation for construction material to be used for road construction.

Size: 13 km surfaced road

Project Location: Rammulotsi, near Viljoenskroon, Free State Province

Objective: Geotechnical Investigation for Township Development.

Size: 800 stands

Project Location: Gortin, near Sasolburg, Free State Province

Objective: Geotechnical Investigation for Township Development.

Size: 1800 stands

Project Location: Ikageng, near Potchefstroom, North West Province

Objective: Geotechnical Investigation for Township Development.

Size: 1000 stands

Project Location: Witklip, near Delmas, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 250 stands

Project Location: Standerton Extension 6, near Standerton, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 500 stands

Project Location: Azalea Extension 1, near Delmas, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 250 stands

Project Location: Sivukile, near Morgenzon, Mpumalanga Province Objective: Geotechnical Investigation for Township Development.

Size: 250 stands

Project Location: Amsterdam, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 337 stands

Project Location: Nkonjaneni, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 156 stands

Project Location: Nkangema, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 9 stands

Project Location: Driefontein, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 102 stands

Project Location: Osloop, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 49 stands

Project Location: eThandakukhanya, near Piet Retief, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 11 stands

Project Location: Ezimbidleni, near Sulpher Spring, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 23 stands

Project Location: Siphuthuma, near Sulpher Spring, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 18 stands

Project Location: Gigigi, near Sulpher Spring, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 19 stands

Project Location: Vesoguhle, near Sulpher Spring, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 65 stands

Project Location: Epodweni, near Sulpher Spring, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 43 stands

Project Location: Emahashini, Mkhondo Municipality, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 12 stands

Project Location: Khalambazo, Mkhondo Municipality, Mpumalanga Province

Objective: Geotechnical Investigation for Township Development.

Size: 120 stands

Project Location: Olympus, Pretoria, Gauteng Province

Objective 1: Geotechnical Investigation for a Double Storey Unit, Late Enrolment.

Objective 2: Construction Report.

Size: Single stand

Project Location: Vaalpark, Sasolburg, Free State Province

Objective 1: Geotechnical Investigation for 3 Single Storey Units, Late Enrolment.

Objective 2: Construction Report.

Size: Single stand

Project Location: Stand 1450 Parkhaven, Kempton Park, Gauteng Province

Objective 1: Geotechnical Investigation for a Double Storey Unit, Late Enrolment.

Objective 2: Construction Report.

Size: Single stand

Project Location: Eigen Street, Zeerust, North West Province

Objective 1: Geotechnical Investigation for a Double Storey Unit.

Size: Single stand

Project Location: Rasimone Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 350 stands

Project Location: Robega Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 450 stands

Project Location: Chaneng Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 550 stands

Project Location: Mafenya Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 450 stands

Project Location: Luka Mogono Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 750 stands

Project Location: Luka South Village, Royal Bafokeng Administration, near Rustenburg, Northwest Province

Objective: Engineering Geological / Geotechnical Investigation for Township Development.

Size: 650 stands

Project Location: Dertig Library, Near Hammanskraal, Pretoria, Gauteng Province

Objective: Geotechnical Investigation for design of a Library and associated facilities.

Size: 0.8 Ha, R4m

Project Location: Dertig Library, Near Hammanskraal, Pretoria, Gauteng Province

Objective: Investigation for Construction Materials.

Size: 0.8 Ha, R4m

Project Location: Olifantsvlei Primary School, at Eikenhof, Gauteng Province

Objective: Geotechnical Investigation for Extension of a School.

Size: Three Classrooms

Project Location: Ramokoka Primary School at Ramokoka Village, North West Province

Objective: Geotechnical Investigation for design Construction of a School.

Size: Admin Block, Toilets and Classrooms.

Project Location: Hendrina Power Station, Mpumalanga Province

Objective: Geotechnical Investigation for construction of an eating facility and an Auditorium.

Size: 2000 m²

Forensic, Civil and Sturctural Engineering

Project: Report on Stability of Excavations and Recommended Safe Excavation Practices for Installation of Sewer Mains and Reticulation in Kanana Extension 3 and 4 near Grassmere Toll Gate on N1 South of Johannesburg following a Fatal Collapse of a Sewer Trench.

Objective: To design safe Excavations following a Fatality.

Size: R42m Project

Project Location: Kusile Power Station, near Witbank, Mpumalanga Province

Objective: Supervision, Quality Control, Construction Monitoring.

Size: Multiple Structires

Project Location: Weldevrede, near Mafikeng, North West Province

Objective: Design, Supervision, Quality Control, Construction Monitoring and Certification.

Size: 450 Houses

Project Location: Moretele Chelets, Mamelodi, Gauteng Province

Objective: Design, Supervision, Quality Control, Construction Monitoring and Certification.

Size: 7 Chalets.

Project Location: Khutsong South Extensions, near Carletonville, Gauteng Province

Objective 1: Geotechnical Appraisal for Tender Purposes - Township Development.

Objective 2: Structural Designs for Houses.

Objective 3: Pricing the Tender.

Size: 5500 stands

Project Location: 21 Polaris Welgeheuwel, near Roodepoort, Gauteng Province

Objective: Forensic Investigation for deteriorating Structure.

Size: Single stand

Project Location: Protea Glen extension 16, Gauteng Province

Objective: Peer Review on Geotechnical, Civil and Structural Engineering aspects for bondable housing developments.

Size: 134 x single stands

Project Location: Ivory Park Extensions 8, 9 and 12, Kliptown and Rabie Ridge Extensions 4 and 5, Gauteng Province

Objective: Peer Review on Geotechnical, Civil and Structural Engineering aspects for subsidy housing developments.

Size: 4 Townships.

Project Location: 543 No. 44 Kingfisher Crescent Willow Acres, near Silverlakes, Gauteng Province

Objective: Forensic Investigation for deteriorating Structure.

Size: Double Storey

Project Location: Erf 1719 No. Turnberry Street Theresa Park Ext 43, near Akasia, Gauteng Province

Objective: Forensic Investigation for deteriorating Structure.

Size: Double Storey

Dolomite Stability Investigations

Project Location: Itsoseng Township, near Lichtenburg, North West Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 703 Ha.

Project Location: Fuel Station, Protea Extension 1, Johannesburg, Gauteng Province

Objective: Investigation for ground stability.

Size: 2,5 Ha.

Project Location: Balmoral Township, near Germinston, Gauteng Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 400 Ha.

Project Location: Bodibe Township, near Lichtenburg, North West Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 2560 Ha.

Project Location: Lekgophung Village, near Lichtenburg, North West Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 339 Ha.

Project 481: Itsoseng Township, near Lichtenburg, North West Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 703 Ha.

Project Location: Khuma Township, near Klerksdorp, North West Province

Objective: Dolomite Stability Investigation for Township Development and associated facilities.

Size: 55 Ha.

Project Location: Makouspan Village, near Mafikeng, North West Province

Objective: Dolomite Stability Investigation for Township Development and Associated Facilities.

Size: 132 Ha.

Project Location: Schoongezicht Village, near Mafikeng, North West Province

Objective: Dolomite Stability Investigation for Township Development and Associated Facilities.

Size: 63 Ha.

Project Location: Naauwpoort Village, near Mafikeng, North West Province

Objective: Dolomite Stability Investigation for Township Development and Associated Facilities.

Size: 152 Ha.

Project Location: Nooitgedacht Village, near Mafikeng, North West Province

Objective: Dolomite Stability Investigation for Township Development and Associated Facilities.

Size: 147 Ha.

Project Location: Khunotswana Village, near Mafikeng, North West Province

Objective: Dolomite Stability Investigation for Township Development and Associated Facilities.

Size: 360 Ha.

Land and Spatial Survey

Full extent of villages and townships were surveyed by the company. The surveys captured stands, dwellings, roads, water lines, sewer lines, electric lines, railway lines, conveyor belts, commercial and social ammenities, contours, pans, borrow pits, mountains, hills, and other surface features.

These are some of many areas surveyes so far: Schoongezicht, Makouspan, Nooitgedacht, Naauwpoort, Lekgophung, Supingstad, Khunotswana, Verdwaal, Itsoseng, Bodibe, Ledig, Mabeskraal, Borolelo, Marikana Extension 2, Maubane, Dertig, Honey View, Sefikine, Makweleng, Mmorogong, Mabeleng, Witrandjies, Makoshong, Mantserre, Kabe, Moletsamongwe, Phalane, Mantsho, Mononono, Madibe, Molema, Mopyane, Reagile, Rankelenyane, Bapong, Bethel, Braakspruit, Brooksby, Dekameelkuil, Driehoek, Greenside, Jakaranda, Kaalpan, Kraalhoek, Lethabong, Ga-Tau, Magong, Mahobieskraal, Makweleng, Mandela Park, Maologane, Mapaputle, Mogolelo, Nkogolwe, Phadima, Tlhatlaganyane, Letlhogoring, Madibe ga Kubu, Mantsha, Morwatshetlha, Ramogoje, Sebowana, Seipone, Tshunyane, Tsokwane, Vryhof, Enselsrust, Goedgevonden, Uitkyk, etc.

CORE VALUES

Sustainability
Integrity
Efficiency
Effectiveness
Corporate social responsibility
Environmental conservation

THOKA GEORSCIENCES CC DIRECTOR'S PROFILE



Mr. Mokotedi E Mogadime Pr.Sci.Nat.

Position: Director and Shareholder

Years of Ecperience: 12

Qualifications: BSc. (Hons) Eng. & Env. Geol., COM-SCO **Professional Menberships**:, MSAIEG, MGSSA, MSAIMM.

Mr. Mogadime got his undergraduate Bachelor of Science degree in geology and applied geology from the University of Natal in 2000. He later graduated with an honours degree in engineering and environmental geology at the University of Pretoria in 2002. After studying at these prestigious universituy, in 2002 still, he joined the world's Patinum Mining Giant, Anglo Platinum mining company and served as a Rock Engineer. He gained his experience from three shafts as detailed in his CV. In 2004 he joined another African Giant, the Council for Geoscience, and was highly involved in consultancy with the Department for Water Affairs performing duties of an Engineering Geologist. Amongst other tasks he was responsible for the raising of Flag Boshielo Dam, centerline and construction material investigation for De Hoop Dam and other associates of Olifants Water Resource Development Scheme such as pumping and balancing wiers, balancing dams, reservoirs and pipelines. In addition to these he conducted a number of dam safety inspections countrywide and rehabilitation of Matlosana Dam. He later joined another parastatal, the National Home Builders Registration Council (NHBRC), head office as a Geotechnical Engineer in January 2006. At NHBRC, he reviewed thousands of geotechnical, dolomite stability reports and structural designs nationwide. He was involved in forensic investigations and remedial works following structural distress. Following achievements at NHBRC, he joined another African Giant, Eskom SOC LTD, apointed as Senior Engineer for five years solely running and leading a Geotechnical Department. At Eskom, he was involved in all aspects from strategy, process controls, policy, scopes of work, bid adjudication, negotiation, peer reviews, supervision, quality control, mentoring, graduate training, etc. His involvement covered all Eskom's running power stations, construction projects such as Kusile Majuba UCG. and Ingula, return to service stations such as Grootvlei and Komati, and lots of pipeline projects such as Sere, Aberdeen Windfarms, Upington Solar Energy, Next Coal (Coal 3) and research projects such as Ocean Pump Storage. He is enrolled for Masters in Project Management with the University of Pretoria on a part time basis. Part of his duties includes involvement in research projects, risk management, project management and technical software development.

Mr Mogadime is a founder and Director of Thoka Geosciences. He has led the development of this company for over five years. He is actively involved in day to day running and development of this company from strategy admin and technical aspects. Thoka Geosciences has conducted close to 100 different investigations in various parts of the country (South Africa).

STAFF COMPLIMENT

Current Staff Compliment is composed of the following:

- Geologists and Engineering Geologists
- Project Managers
- Support Staff
- Technicians and Skilled Staff
- Geotechnical Engineers
- Civil and Structural Engineers
- Land Surveyors

OTHER BUSINESSES

Plant Hire

Drilling Operations

BUSINESS INFORMATION

Company Registration Number: 2007/171669/23 **Income Tax Number:** 9381174169 Vat Number: 4450262375 **NHBRC Registration Number:** 122158320 **CIDB CRS No.**: 100179701GB - 1CE & **Banking Details: ABSA** Bank: Type of Account: Cheque **Account Number:** 4070059497 **Branch Name:** Quagga Centre **Branch Code:** 632005 **Contact Details: Contact Person:** Tshwaro ME Mogadime Pr.Sci.Nat. Cell: Telephone: +27 31 818 +27 82 932 8465 0934/0/1/2/3 Physical Address: (H Office) 2 Devereux Place 35 Woltemade Street Philip Nell Park Colemborg Park Randfontein Pretoria 1759 0183 South Africa South Africa Postal Address: (Head Office) P O Box 1910 Silverton 0127 South Africa Physical Address: (Limpopo): 10 Kruger Street Mokopane 0601 South Africa Postal Address: (): Fax: +27 86 516 8363 E-mail: thokageo@gmail.com or tshwarom@thokageo.co.za Website Address: www.thokageo.co.za ----- THE END -----Thoka

Geo sciences CC.