

*Role Profile*

**Geophysics Manager**

GENERAL CHARACTERISTICS			
Group function / BU	De Beers Exploration	Date	Sept 2018
Department / Operation	Technical and Laboratory Services	Job band	GBF 6
Location	Johannesburg		
Discipline / Sub-discipline	Geosciences – Technical Services		

**CONTEXT**

De Beers Exploration is focused on delivering new profitable diamond production in a safe and sustainable way to create value growth to De Beers in alignment with its strategic and business objectives. Target areas are selected and prioritized on the prospectivity of their diamond mineral systems to deliver the requisite economic returns, underpinned by the country-specific economic viability models, risk and legal-commercial profiles. The next step is to build a robust discovery pipeline at the early stage through rapidly prioritizing kimberlites, using technical criteria and economic viability models, and to then develop a portfolio with the potential to deliver resource evaluation projects.

**PURPOSE OF THE ROLE**

Manage a geophysical services department to provide De Beers Exploration with specialist geophysical inputs and outputs to forward the discovery and evaluation of diamond resources.

**LEVEL OF WORK OF THE ROLE**

**Level of Work 2 – Monitoring & Diagnosis:** Application of expertise in the field of geophysics to integrate and interpret data, as well as to improve technical processes and methodologies to increase the effectiveness of decision making in Exploration.

**WORK OF ROLE (INCLUDING AUTHORITIES AND OUTPUTS)**

Work of Role	Output
<p><b>Provide Specialist Input</b></p> <ul style="list-style-type: none"> <li>• Develops guidelines and standards for Geophysics activities and drives global adoption</li> <li>• Advise and provide specialist input in respect of geophysics to exploration teams in order to decide further work on target areas/anomalies or discoveries</li> <li>• Identify key shortcomings around the application of geophysics information and ensure processes and/or systems are put in</li> </ul>	<ul style="list-style-type: none"> <li>• Geophysics guidelines and standards</li> <li>• Geophysics support strategy aligned with Exploration strategy.</li> <li>• Signed off geophysics interpretation report.</li> </ul>

<p>place to address these, through conducting regular operational assessments and reviews within the functional area.</p> <ul style="list-style-type: none"> <li>Formulate and implement operational strategy for delivering geophysical services to De Beers Exploration. Maintain and where applicable, implement up-to-date knowledge of current and future trends in the field of geophysics i.e. fosters a network with contractors, universities and other geophysicists</li> </ul>	<ul style="list-style-type: none"> <li>Approved geophysics reports of senior specialists.</li> <li>Advice and recommendations to venture and technical reviews teams.</li> <li>Recommendations for continuous improvement in geophysics and integration with other specialists for more efficient exploration</li> <li>Application of new developments in the field of geophysics in diamond exploration</li> </ul>
<p><b>Leadership and Integration</b></p> <ul style="list-style-type: none"> <li>Promotes the sharing of geophysical knowledge, best practice and innovation across Geosciences by visiting sites on a regular basis</li> <li>Manage self to ensure continued growth and stretch and to create the opportunity whereby technical knowledge is exchanged within the wider De Beers Exploration environment.</li> <li>Manage geophysics department and ensure cross discipline integration and development of the team members.</li> <li>Build effective working relationships with manager, peers, team members, customers and company business leaders.</li> <li>Identify appropriate resources from within the functional areas as well as from external organisations /persons in order to assist and enhance the delivery of projects within geophysics.</li> <li>Provide relevant and up-to-date technical training to relevant exploration (in active ventures) and laboratory staff in basic geophysics.</li> <li>Ensures all contractors and team members adhere to De Beers standards and are aware of specific health and safety issues relating to geophysical methods</li> </ul>	<ul style="list-style-type: none"> <li>Research and development projects completed.</li> <li>Network of geophysicists.</li> <li>Number of training sessions delivered.</li> <li>Knowledge exchange through training sessions.</li> <li>Internal and/external publications and research presentations.</li> <li>Coaching and mentoring of Geoscientists.</li> </ul>
<p><b>Finance</b></p> <ul style="list-style-type: none"> <li>Develop long term business plans including forecasts and budget plans (short and long term)</li> <li>Review performance against plan and report deviations and continuously adjust to ensure compliance</li> <li>Apply financial/commercial business acumen within a project/programme environment inclusive of meaningful business case delivery and appropriate resourcing and delivery of such projects/programmes.</li> <li>Motivates for and manages capital projects with respect to geophysics/geophysical assets</li> </ul>	<ul style="list-style-type: none"> <li>Business case accepted and signed off.</li> <li>Budgets prepared and approved (3 year).</li> <li>Budget performance review (monthly).</li> <li>Strategic operational planning and execution.</li> <li>Capital project documentation (e.g. tender board documents)</li> </ul>
<b>ROLE RELATIONSHIPS</b>	
<b>Managerially accountable to</b>	Senior Technical Services and Laboratories Manager

<b>Direct reports</b>	Senior Geophysicist (1) Geophysicist (1) Technician: Geophysics (1)
<b>Key internal role relationships</b>	<ul style="list-style-type: none"> <li>• Senior Manager Future Exploration and Projects</li> <li>• Venture Managers / Project Geophysicists / Mine Managers</li> <li>• Technical Reviews Manager</li> <li>• Exploration Technical Experts</li> <li>• Kimberlite Petrologists</li> <li>• Information Centre &amp; Data Management</li> <li>• ECOHS &amp; Compliance Team</li> <li>• MRM</li> <li>• Other technical specialists</li> </ul>
<b>External relationships</b>	Geophysics software vendors, Geophysics community, Academic Institutions, Consultants/Contractors, Anglo American Group Exploration and Geosciences, De Beers MRM and De Beers mine geologists.
<b>PERSON SPECIFICATION (QUALIFICATIONS, EXPERIENCE, KNOWLEDGE AND SKILLS)</b>	
<b>QUALIFICATIONS</b>	<ul style="list-style-type: none"> <li>• BSc Honours degree in Geophysics (NQF 8).</li> <li>• MSc/PhD (NQF 9/10) would be an advantage.</li> <li>• Registered professional in a recognised body (e.g. SACNASP) or eligible for such registration.</li> </ul>
<b>EXPERIENCE</b>	<ul style="list-style-type: none"> <li>• 10 years' experience post qualification working in the geophysical field, preferably on kimberlites or related rocks</li> <li>• Exploration geophysics preferably in kimberlites or related rocks</li> <li>• Experience in R&amp;D projects could be an added advantage</li> </ul>
<b>KNOWLEDGE AND SKILLS</b>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>• Advanced geophysical exploration methodology</li> <li>• Advanced geophysics interpretation software</li> <li>• Advanced kimberlite interpretation from geophysics</li> <li>• Advanced geophysics data visualisation</li> <li>• Intermediate kimberlite exploration</li> <li>• Basic statistics</li> </ul> <p><b>Skills</b></p> <ul style="list-style-type: none"> <li>• Advanced geophysical exploration methodology</li> <li>• Advanced geophysics interpretation software</li> <li>• Advanced kimberlite interpretation from geophysics</li> <li>• Advanced geophysics data visualisation</li> <li>• Intermediate kimberlite exploration</li> <li>• Basic statistics</li> </ul>
<b>COMPETENCY</b>	<p><b>Technical Category:</b></p> <ul style="list-style-type: none"> <li>• Mastery level (4): <ul style="list-style-type: none"> <li>○ Applying Geophysics.</li> <li>○ Geoscientific Data Acquisition and Documentation</li> <li>○ Geoscientific Data Interpretation and Dissemination</li> </ul> </li> <li>• Advanced/Applied level (3): <ul style="list-style-type: none"> <li>○ Enabling Technical Excellence</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>○ Data Management and Validation</li> <li>● Proficient/Comprehensive level (2):             <ul style="list-style-type: none"> <li>○ Applying Geology.</li> <li>○ Resource modelling and Evaluation Principles.</li> <li>○ Project management</li> <li>○ Operational Risk Management.</li> </ul> </li> <li><b>Behavioural Category:</b></li> <li>● Level 3:             <ul style="list-style-type: none"> <li>○ Broad scanning, Collaboration, driving performance, Decision making, Setting direction and Impact &amp; influence</li> </ul> </li> <li>● Level 2:             <ul style="list-style-type: none"> <li>○ , Leading change, Inspiring others, , Business Acumen.</li> </ul> </li> </ul>
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**BEHAVIOURS**

**Broad scanning (3):** Seeking and using the broadest internal and external view, beyond current issues and constraints. Proactively considers and researches the broader industry.

**Setting direction (3):** Setting clear direction and priorities and gaining support of others. Brings the strategy to life through aligned plans.

**Leading change (2):** Alerting and engaging people in the need for specific transformational changes in the way things are done in Anglo American. Fosters a culture that is open to change.

**Inspiring others (2):** Energising, developing and enabling colleagues to succeed. Motivates and aligns people around the goal.

**Collaboration (3):** Building relationships and fostering cross boundary collaboration. Delivers increased value through broad collaboration.

**Impact and Influence (3):** Deepening self-awareness and applying influencing techniques that gain commitment and support. Adapts influencing styles to different situations.

**Decision making (3):** Evaluating information to make sound decisions to manage risk and to drive safe, reliable and sustainable operations and protect the licence to operate. Defines the issue seeking advice from others, before deciding.

**Driving performance (3):** Driving plan delivery, holding people and self to account. Creates and leads a high-performance culture.

**Business acumen (1):** Applying rigorous commercial and business thinking to decision making in order to generate value. Understands how value is created.

**ORGANISATION CHART**

