

Role Profile

Geophysicist

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	
<p>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.</p>	
PURPOSE OF THE ROLE	
<p>Provide ventures (and the technical reviews team) with specialist geophysical inputs and outputs to forward the discovery and evaluation of diamond resources.</p>	
LEVEL OF WORK OF THE ROLE	
<p>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.</p>	
WORK OF ROLE (INCLUDING AUTHORITIES AND OUTPUTS)	
Work of Role	Output
<p>Decision making support</p> <ul style="list-style-type: none"> Process and interpret various types of geophysical data including magnetic, electromagnetic and gravity data to produce a list of outputs (e.g. targets, drillhole positions) Provide geophysical services to the ventures and specialists by designing fit for purpose ground geophysics surveys to inform exploration e.g. understands the granularity of information needed and scopes surveys accordingly. 	<ul style="list-style-type: none"> Geophysics reports with key outputs (e.g. targets) Geophysical interpretations and 2D /3D model of ore body

<ul style="list-style-type: none"> • Compile or review geophysical field survey planning reports, oversee geophysical surveys and QC the field data. • Review, process and interpret geophysics datasets to assist in the prioritisation of anomalies for drilling/for further work and recommending drillhole positions • Structure geoscientific information from various sources in respect of the anomaly/kimberlite for technical reviews • Archive geophysical data in the correct, approved repositories according to approved standards 	<ul style="list-style-type: none"> • Ground survey planning and specifications • Feedback on quality of geophysical surveys. • Processed geophysics data • Drill planning reports with list of geophysical targets and or drill hole positions • Compilation of geoscientific data for technical reviews • Archived geophysical data
<p>Continuous improvement</p> <ul style="list-style-type: none"> • Identify which geophysical tools and data meet the requirements are required to deliver the requisite geo-economic information (e.g. targets, kimberlite size) appropriate to the geological setting. • Identifies opportunities to improve the quality of data and reduce the noise caused by factors like adjacent mining activities or thunderstorms 	<ul style="list-style-type: none"> • Technical reports detailing changes to the methodologies
<p>Leadership and Integration</p> <ul style="list-style-type: none"> • 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. • Train and manage field technicians in the acquisition of ground geophysics • Develop technical competency. 	<ul style="list-style-type: none"> • Positive, collaborative contribution to the venture teams and technical specialist teams. • Identified personal development plan
ROLE RELATIONSHIPS	
Managerially accountable to	Geophysics Manager
Direct reports	None
Key internal role relationships	<ul style="list-style-type: none"> • Venture Geophysicists, project managers and field technicians • Technical Reviews Manager • Kimberlite Petrologists • Data assurance team
External relationships	Scientific and industry community in geophysics. Contractors in geophysics
PERSON SPECIFICATION (QUALIFICATIONS, EXPERIENCE, KNOWLEDGE AND SKILLS)	
QUALIFICATIONS	<ul style="list-style-type: none"> • BSc Honours degree in Geophysics

EXPERIENCE	<ul style="list-style-type: none"> • 4-5 years' post-qualification experience working in the geophysical field, preferably on kimberlites or related rocks
KNOWLEDGE AND SKILLS	<p>Knowledge</p> <ul style="list-style-type: none"> • Proficient in geophysical inversion software. • Proficient data processing, analysis and management. • Proficient geophysical survey techniques. • Proficient geophysics data interpretation. • Basic diamond exploration. <p>Skills</p> <ul style="list-style-type: none"> • Analytical and interpretation of geophysical data. • Written and verbal communication. • Time management.
COMPETENCY	<p>Technical Category:</p> <ul style="list-style-type: none"> • Proficient/Comprehensive level (2): <ul style="list-style-type: none"> ○ Applying Geophysics. ○ Geoscientific Data Acquisition and Documentation. ○ Enabling Technical Excellence. ○ Geoscientific Data Interpretation and Dissemination. • Basic level (1): <ul style="list-style-type: none"> ○ Applying Geology. ○ Data Management and Validation. ○ Operational Risk Management. ○ Technical report writing <p>Behavioural Category:</p> <ul style="list-style-type: none"> • Comprehensive level (1): <ul style="list-style-type: none"> ○ Collaboration ○ Broad scanning. ○ Driving performance. ○ Decision making. ○ Impact & influence.

BEHAVIOURS

Broad scanning (1): Seeking and using the broadest internal and external view, beyond current issues and constraints. Demonstrates curiosity and interest about the Diamond Exploration and Indicator Mineral techniques.

Collaboration (1): Building relationships and fostering cross boundary collaboration. Actively brings people together to deliver work.

Impact and Influence (1): Deepening self-awareness and applying influencing techniques that gain commitment and support. Understands self and is aware of own impact on others.

Decision making (1): Evaluating information to make sound decisions to manage risk and to drive safe, reliable and sustainable operations and protect the licence to operate. Makes decisions using both a sense of what is correct and logical.

Driving performance (1): Driving plan delivery, holding people and self to account. Sets high personal performance standards.

ORGANISATION CHART

