

Murray McClintock PhD, MAUSIMM

20 Moray Place, Dunedin 9016

New Zealand

E. volcanicsolutions@clear.net.nz

Ph. +64-3-455-5560; Mob. +64-21-757273

New Zealand citizen; eligible for work in Australia

KEY SKILLS

- Experienced manager of exploration programs in remote and rugged locations
- 11 years of geological experience; accredited JORC/NI4-3101 Qualified Professional
- Exploration, mapping and mining experience in central Africa, South Africa, Antarctica, Canada, New Zealand, USA
- Hands-on expertise in exploration for diamonds, gold, PGM, iron and base metals
- Strengths in volcanology, sedimentology, geochemistry and structural geology
- Excellent communication skills reflected in clear, concise technical reports, press releases and publications in scientific journals
- French as a second language; strength in multi-cultural, multi-lingual, developing-nation settings

EXPERIENCE IN EXPLORATION MANAGEMENT

- Leadership, supervision and motivation of exploration teams
- Intelligent, responsive management of a continual pipeline of exploration opportunities for publically listed companies
- Generation and testing of high-quality predictive geological models
- Management of exploration budgets, administration and workplace safety
- Database construction, maps, recommendations for the completion of reporting
- Liaison with third-party contractors (geophysics, remote sensing providers, laboratories, etc.)
- Monitoring commitments on exploration permits in developing-nation environment
- Ambulance-level first aid; operation of 4x4, excavators (30 tonne), bulldozers (45 tonne)

EXPERIENCE IN RESOURCE EVALUATION

- Planning and execution of fieldwork, trenching and drilling campaigns on large, remote tenements, to conduct mapping, sampling, core analysis and to validate RC samples
- Evaluation of mineral deposits and prospective areas by reviewing and interpreting geological and geophysical data to JORC/NI43-101 standards
- Development of 3D geological understanding through utilization of geophysical data/remote sensing, mapping, drilling data, petrology and geochemistry
- Publication of past work in international geology journals (8 published papers) attests to its quality

EXPERIENCE IN GEOLOGICAL AND GEOCHEMICAL MAPPING AND SAMPLING

- Geological field mapping of isolated and difficult terrains in tropical, polar and mountainous conditions
- Preparation and digital capture of geological and geochemical maps, sections and logs using MapInfo, ArcGIS, Surfer, remote sensing data and applications
- Geological analysis, supervision and coordination of geological and geotechnical core logging
- Supervision, training and coordination of sampling programs, core logging, bedrock and soil samples using GPS and laser surveying, and hand-held and on-site geochemical analysis tools

EXPLORATION & PROJECT EXPERIENCE

2007-08 Dome Ventures Corporation, Gabon

Greenfields senior exploration project geologist, Gabon, Central Africa

Exploration for gold, iron, PGM and base metals in 13,000 km² of unexplored and poorly explored Archean basement and Proterozoic cover. Organising and coordinating up to 50 field personnel in a greenfields exploration project. Work included; geological mapping, analysis of geochemistry and geology and target selection to drive exploration forward; planning and execution of stream sediment and soil geochemical surveys, trenching and drilling in demanding conditions; liaison with village communities, local and regional government and suppliers in French-speaking, developing-nation environment.

2006 De Beers Canada Inc. & Kensington Resources Ltd., Canada

Lead project geologist/petrologist in advanced diamond exploration project, Canada

Developed new emplacement models for a complex, multi-vent kimberlite diatreme and cone cluster. Included supervision and QA/QC of microdiamond, petrology and geochemical sampling program plus training geologists in core logging.

2003-06 University of Otago (New Zealand), University of Hawaii (USA)

Volcanology of a flood basalt cone, crater, lava and intrusion complex, Karoo, South Africa

Research geologist. 1:10,000 GIS field mapping, geochemistry and petrography of a 100 km² overlapping complex of diatremes, tuff rings and cones, flood basalt lava and intrusions in South Africa.

2005 Department of Geology, University of Otago

Intrusion mechanics of Ferrar Dolerite intrusion swarm, Dry Valleys, Antarctica

Research geologist plus operations and safety manager in helicopter-supported deep-field program in mountainous terrain. Mapping geometry of and relationships between large to small intrusions (dikes, sheets, sills) to evaluate relative timing of intrusion, direction of magma flow, formation of crystallization fronts and controls of changes in the shape and size of intrusions laterally and vertically.

1999-02 Department of Geology, University of Otago

Volcanology of flood basalt crater and diatreme complexes, South Victoria Land, Antarctica

Research geologist plus operations and safety manager in helicopter-supported deep-field program. Detailed mapping, rock description and model development for 30 km² diatreme complex formed by interaction of flood basalt magma and wet sediment. Supervision of two geologists in mapping program.

1999 Department of Geology, University of Otago

Structural and metamorphic evolution of Alpine Fault plate boundary, New Zealand

Research geologist. Detailed mapping, structural geology and model development for previously unmapped 10 km section of the Australia-Pacific plate boundary. Revealed segmentation of continental-scale reverse fault into reverse and strike-slip dominated sections plus complex metamorphic history of faulted ophiolite slices in shear zone.

1995 Golden Bay Mining Ltd., Yukon Territory, Canada

Miner in a placer gold mine in the Klondike gold field, Canada

PROFESSIONAL MEMBERSHIPS AND SERVICE

Member of AUSIMM, Geological Society of New Zealand, Royal Society of New Zealand, American Geophysical Union, International Association of Volcanology and Chemistry of the Earth's Interior

- Eight papers on geochemistry, structural geology, volcanology, metamorphic geology and sedimentology published in international peer-reviewed geology journals.
- Fulbright Scholarship (2004-05), New Zealand Foundation for Research Science & Technology Top Achiever Doctoral Scholarship (2004-05), First in Geology at University of Otago, 1999
- Member of the Scientific Committee of the 3rd International Maar Conference, Argentina 2009

REFERENCES

Available on request