

**EDUCATION**

B. Sc. Geology, University of Otago 1992  
Grad Cert Frontline Management, Monash University, 2001

**AFFILIATIONS**

Member of the Australasian Institute of Mining and Metallurgy  
Qualified Fire Fighter – New Zealand Fire Service

**EXPERIENCE**

2010 - Present

**RESOURCE DEVELOPMENT CONSULTANTS LTD**  
*PRINCIPAL GEOLOGIST*

**NEW ZEALAND**

- Resource Geology
- Due Diligence assessment of geological data

2008 - 2010

**GOLDER ASSOCIATES (NZ) LTD**  
*SENIOR GEOLOGIST (2008 TO 2010)*

**WANAKA, NEW ZEALAND**

- Resource Geology work for a number of New Zealand companies.
- Management of drilling programmes.
- Data Compilation
- Geological Modeling
- Resource estimation using both grid modeling and block modeling techniques for a number of coal deposits.
- Mine Planning and review

2006 - 2008

**SELF EMPLOYED**  
*PROJECT MANAGEMENT (2006 TO 2008)*

**WELLINGTON AND WANAKA, NEW ZEALAND**

2004 - 2006

**CROWN MINERALS, MINISTRY OF ECONOMIC DEVELOPMENT**  
*SENIOR MINING GEOLOGIST (2004 TO 2006)*

**WELLINGTON, NEW ZEALAND**

Responsible for overseeing all mining activities relating to Crown owned resources, ensuring that operators were complying with the requirements of their mining permits and licenses. Responsible for undertaking technical assessments for any proposed mining ventures.

Provision of advice and briefings to Ministers of Cabinet on a range of matters relating to the mining industry of New Zealand.

2005 New Zealand representative to the APEC expert group for Clean Coal Technology, Cebu Philippines.

2003 - 2004

**ADAMUS RESOURCES****PERTH, WESTERN AUSTRALIA AND GHANA***SENIOR EXPLORATION GEOLOGIST (2003 TO 2004)*

Responsible for due diligence assessment of the Anwia project prior to Adamus resources purchasing this project.

Responsible for managing all exploration activities relating to the Anwia project and also development of initial resource estimates and input into prefeasibility studies.

2002 - 2003

**ROBE RIVER IRON ASSOCIATES****PERTH/PANNAWONICA, AUSTRALIA***CONSULTING GEOLOGIST*

Responsible for assessing short term mine planning requirements and implementation of appropriate grade control tools to enable mine planning objectives to be achieved

2002

**GOLDER ASSOCIATES (PTY) LTD****PERTH, AUSTRALIA***SENIOR MINING GEOLOGIST*

Chain of mining studies looking at optimal grade control sampling and mining selectivity using conditional simulation techniques.

Sampling QA/QC assessment a for large laterite nickel project

2000-2002

**SUNRISE DAM GOLD MINE, ANGO GOLD AUSTRALIA LTD****LAVERTON, WESTERN AUSTRALIA***CHIEF MINING GEOLOGIST*

Responsible for the management of all geological personnel and functions for the Sunrise Dam Goldmine. Management of budgets, recruiting, resource development activities, external consultants

1997 - 2000

**SUNRISE DAM GOLD MINE, ANGO GOLD AUSTRALIA LTD****LAVERTON, WESTERN AUSTRALIA***SENIOR MINING GEOLOGIST AND RESOURCE GEOLOGIST*

Management of open pit grade control activities and personnel.

Development of reconciliation systems, development of conditional simulation parameters for grade control purposes. Development of updated resource estimates and development of initial underground geological models.

1995 - 1997

**COEUR GOLD NZ LTD****WAIHI, NEW ZEALAND***MINE GEOLOGIST*

Open Pit and underground mine geology.

Preparation of wireframes for resource estimation.

1992 - 1995

**MACRAES MINING COMPANY LTD****NEW ZEALAND***MINE AND EXPLORATION GEOLOGIST (1992 TO 1995)*

Supervision of RC and Diamond drill programs

Supervision of Grade Control Activities

**MAJOR PROJECTS****PIKE RIVER**

Due Diligence review of Geological data

**SENZ**

Drill program management                      New Vale PAG5

Resource Estimation and Reporting  
New Vale PAG5

Croydon PAG3

Mangapehi PAG3

**EASTERN CORPORATION**

Geological Review                                      Whareatea West

Resource Estimation                                  Takitimu (2008 and 2009)

Mine Planning    Takitimu

Crown permit compliance and reporting (2009 2010)

**HOLCIM**

Resource Estimation                                  Ngapara

Mine Planning and concept studies              Ngapara