

Terra Search Pty Ltd

Specialists in Mineral Exploration, Geology and
Computing

Curriculum Vitae March, 2018

Dr Simon Beams

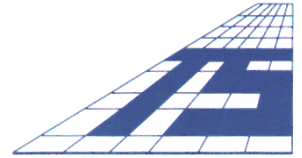
**Managing Director
Principal Geologist**

Terra Search Pty Ltd

Townsville
PO Box 981, Hyde Park QLD 4812
21 Keane Street, Currajong QLD 4812
Phone: (07) 4728 6851 Fax: (07) 4728 6854

Perth
PO Box 2016, Carlisle North WA 6101
12/120 Briggs Street, Welshpool WA 6106
Phone: (08) 9472 8546 Fax: (08) 9472 8548

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Simon Beams - Curriculum Vitae 2018

Name: Simon Beams

Address:

TERRA SEARCH PTY LTD

PO Box 981, Hyde Park QLD 4812
21 Keane Street, Currajong QLD 4812
Phone: (07) 4728 6851
Fax: (07) 4728 6854

DOB:

28/02/54

Nationality:

Australian,

Marital Status:

Married (3 children), 3 grand children

Current Documentation

Australian Passport
Queensland Drivers Licence
Vetec approved 4WD Certificate

Profile:

Dr Beams is a geologist with over 45 years broad experience in mineral exploration and applied geochemical and petrological research. Simon has been directly involved in exploration for gold, base metal, uranium and other commodities across Eastern Australia since 1976. In period 1980-1987 he worked as project geologist with Esso Minerals. For the past 32 years Simon has been Managing Director and Principal Geologist of Terra Search Pty Ltd. He has produced several key publications in the areas of mineral deposit geology and geochemistry, exploration data management, regolith relations, petrology and granite genesis and regional geology of North Queensland.

Dr Beams has long history of involvement with Government Instrumentalities in producing regional geological maps and has made significant contributions to the understanding of the regional geology of several areas across eastern Australia. In August, 2016 these contributions were recognized by the awarding to Dr Simon Beams by the Australian Institute of Geosciences and the Geological Society of Australia of the inaugural John Campbell Miles medal for outstanding contribution to economic geology in Queensland, Australia.

See - <http://rses.anu.edu.au/news-events/queensland-geoscientists-honour-anu-alumnus-dr-simon-beams>

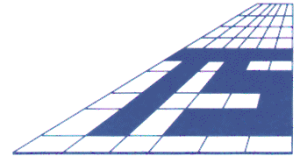
Academic Qualifications:

1980	PhD (Geology) La Trobe University (1980)
1975	BSc Hons (First Class) Australian National University

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- Member:
- Geological Society Australia
 - Australasian Institute Mining & Metallurgy
 - Australian Institute of Geoscientists
 - Society Economic Geologists
 - Association of Exploration Geochemists
- Boards/
Directorships:
Standing
Committees
- Managing Director: Terra Search Pty Ltd
 - Serving board member of EGRU (Economic Geology Research Unit), James Cook University, Townsville, Qld.(2005-Present)
 - Member of Australian Mining & Exploration Companies (AMEC) Standing Committee for Exploration in Queensland (2011-Present)
 - Member Advisory Committee CRC LEME (Landscape Evolution & Mineral Exploration) 1996-
 -

AWARDS

August 2016. Awarded the John Campbell Miles Medal for Outstanding Contribution to Economic Geology of Queensland by the Geological Society of Australia (Queensland Division and the Australian Institute of Geosciences (Queensland Division)).

Industry Experience and Expertise:

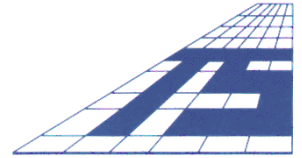
Highlights of Dr Simon Beams' technical expertise that will be of direct benefit to mineral exploration projects under Terra Search management include:

- 32 years' experience as Principal Geologist/Exploration Manager for Terra Search Pty Ltd running turn-key style exploration programs on time and on budget. During this time Terra Search's turnover has exceeded \$120 million. Terra Search has offices in Townsville, Perth, and Bathurst with a field depot in Charters Towers.
- Specialist technical expertise in geochemistry, exploration methodology, regional geology, petrology, exploration data management.
- At Terra Search Dr Beams has managed a staff of 40 to 60 exploration personnel that have been involved in the direct implementation of in excess of **200 million dollars** worth of cumulative exploration expenditure across Australia and internationally over the past three decades.
- Operating in all terrains throughout Australia with specialist ability in undertaking field programs in remote areas of Northern Australia.
- Proven geological technical ability with track record of discoveries and exploration thoroughness. Discoveries include **Reward** (massive sulphide pipe: Mt Windsor Volcanics, NQ); **Grevillea** (shale hosted Zn-Pb-Ag: Mt Isa Block); **Piccadilly** (High level vein, Burdekin Basin,NQ) **Mt Dalrymple/Gettysberg** (gold breccia/vein: Northern Drummond Basin, NQ); **Mt Mackenzie Extensions** (acid sulphate gold: Connors Arch, Eastern Qld). **Cudjee Creek Oil Shale**, Croydon district,NQ. Geological evaluations include: **Rocklands Cu-Co-Au** deposit, Cloncurry District for Cudeco; **Tick Hill Au** deposit for Diatreme Resources; **Barr Creek Phosphate Deposit**, NW Qld, **Lagoon Creek, uranium exploration**, Myally area, NW Qld, for Superior Resources. **Far Fanning Au** , Burdekin Basin for Tower Holdings; **Hadleigh Castle** mesothermal Gold, Ravenswood Batholith,NQ. **KSO Gold Mine**. Exploration, PDR Laos.
- Unique tropical Australia mineral province experience where Terra Search principals and staff have been operating for over 30 years. In North East Queensland Dr Beams' efforts have significantly contributed to the

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development of the mineral industry in the region: through the Reward discovery, managing of exploration programs in the Mt Leyshon, Charters Towers town, Ravenswood, Mt Windsor belt, and Rishton Mine Corridor. Moreover Dr Beams' geological understanding of the region is well recognized by his peers through reference to publications, maps, reports, excursion guides he has written on the North East Queensland Mineral Province. In North West Queensland, he has experience across many of the major exploration projects, operating mines and geological provinces, providing staff, geological consulting, equipment and field technical support.

Data Management Leadership

Dr Beams has been team leader of several leading edge data management projects. Some examples are:

- 2006-2012: exploration data compilation project for the Qld DEEDI covering Queensland Mineral Provinces: Mt Isa East and West; Hodgkinson Basin, Drummond Basin, Mt Rawdon Corridor, South East Queensland.
- 2002-2006; 2014-2015 : Successful tendering for World Bank funded GIS project for industry strengthening of Department of Mining/Mineral Resources Authority (MRA) PNG. Compilation of fully attributed digital exploration data set which has led to significant increase in exploration across the country in two tranches.
- 1993-1997: The completion of AMIRA projects (Australian Mineral Industries Research Association) "The Optimisation of the Open File Resource - Mt Isa Block P413 and Eastern Queensland P413A" and major updates. Sponsored by 20 major mining and exploration companies and the Queensland Dept of Natural Resources and Mines. He has also been heavily involved in compilation in other Queensland Mineral Provinces: Drummond Basin, Ravenswood Block, and Georgetown Block.
- Release of the Explorer 3 mineral exploration data management system after extensive research and development. Explorer 3 is acknowledged by major mining houses and the Queensland, NSW, Northern Territory and Victorian Geological Surveys, AGSO and Geological Survey of PNG as at the forefront of capture, storage and manipulation of exploration data.
- Winning of several competitive tenders and co-operative projects to compile mineral province scale open file data sets across eastern and northern Australia and PNG, leading to a fully attributed exploration data set currently standing at 5.5 million samples. Much of these data are now released to the general exploration community through the NSW, Victorian, Queensland, South Australian, NT State governments and the PNG government.

Field Project Management, Data Compilations & Geological Evaluations

Some of Terra Search's larger field management experiences directly handled by Dr Beams include:

Geological Survey of Queensland

Update of Metallogeny and Geology of the Charters Towers and Georgetown Districts, North East Queensland
(2014-2017, Co-Leader with Dr Gregg Morrison)

Collaborative research , geological evaluation and interpretation of north east Queensland geology and metallogeny. Update of 100,000 Charters Towers and Ravenswood geology, mineral occurrences, integration of aeromagnetic and radiometric interpretation with geological mapping and geochemical compilation.

Referee: Dr Vladimir Lisitsin, Research Coordinator

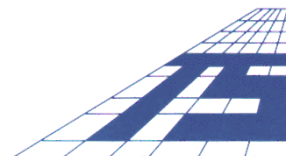
Piccadilly Gold Mines/Cannindah Resources

Piccadilly Gold Project , Burdekin Basin, North Queensland

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(2012-2018)

Development of geological targets from reinterpretation of aeromagnetics, high resolution ground magnetics, innovative multi-element surface geochemistry, trench sampling. Delineation of gold mineralised shoots and drill testing. Competent Person and ASX reporting.

Referee: Tom Pickett, CEO

Phonesack/KSO Mining, PDR Lao

Near Mine Exploration Program , KSO Mine, PDR Laos

(2016-2018)

Winning of international tender to design , implement, interpret gold exploration program at KSO Mine, PDR Laos. Major exploration program developed and implemented surrounding the KSO Mine area in jungle covered, mountainous terrain. Assembling of experienced team of expat geologists with in-country knowledge ,plus team of local geologists and geotechnical support. Grass roots exploration involving stream sediment, panned concentrate, ridge and spur and grid soils, rock chip sampling. Aeromagnetic and aeroradiometric interpretation, development of geological targets for trench and drill testing. Competent Person reporting.

Regional exploration assessment and development of exploration procedures.

Referee: Wilmar Ladia, Deputy Exploration Manager, Khamkeut Saen Oudon Gold Mine (KSO), Phonesackgroup, Lao-PDR

MGT Resources/Avira

Gettysberg , North Drummond Basin, Qld

(2005-2018)

Geological targeting , innovative surface geochemical survey, development of structural model , drill targeting and discovery of high grade gold intercepts and series of plunging shoots. Competent Person and ASX reporting.

Reference: Gary Kuo, Director; Dr Verity Borthwick, Senior Geologist

Real (Aust) Holdings Pty Ltd

Cudjee Creek , Old Coralie

(2013-2016)

Geological targeting , aeromagnetic interpretation, ground magnetic and gravity data collection, processing and interpretation. Drill supervision, discovery of major Oil Shale field. Successfully drilled through artesian aquifer and into previously unknown crystalline basement. Competent Person reporting.

Referee: Mr Jianxi Wang, CEO

Denjim Pty Ltd

Hadleigh CastleGold Mine- Mesothermal gold veins, Charters Towers District , NQld

(2013-2018)

Data compilation, validation and JORC compliance, geological targeting , JORC Resource estimation. Competent Person reporting .

Referee: Brett Duck, Principal Geologist

Tower Holdings

Far Fanning Gold Mine- High level Gold vein system, Charters Towers District , NQld

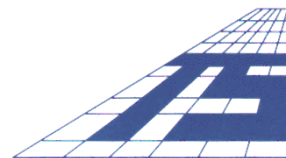
(2012-2015)

Supervision of sampling of dumps and interpretation of results in terms of suitability for beneficiation studies , Evaluation of beneficiation by Ore Sorter including visit to Tomra in Sydney and Germany to test proof of concept. Data compilation, validation and JORC compliance, geological targeting , JORC Resource estimation. Competent Person reporting .

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Referee: Anthony Aiossa/Peter Lloyd, Operations Manager

Superior Resources Limited

Dajarra, Inca Creek, Myally, Nicholson Projects, Smoky Creek, North West Qld. Cassidy Creek & Greenvale Projects, North East Qld. (2006-2017)

Ground evaluation, exploration data review, geological mapping, surface sampling, drill program supervision, logistics management and program implementation and reporting. Evaluation of sediment hosted massive sulphides, volcanic hosted massive sulphides, Broken Hill Type deposits, uranium properties. Competent Person and ASX reporting

Referee: Ken Harvey, Managing Director

Phosphate International

Barr Creek Phosphate Project- Georgina Basin, North West Queensland
(2014-2016)

Evaluation of phosphate potential of Barr Creek area. Assembly of all existing open file drill and geochemical data, modelling of potential resources, geological targeting. Design and implementation of successful drilling program. Data compilation, validation and sampling ensuring JORC compliance, JORC Resource estimation. Competent Person reporting

Sunrise Minerals Pty Ltd

Cape York Bauxite, Weipa-Aurukun district, Far North Qld. (2012-2016)

Integration of regional radiometric data, geological mapping, historical drilling data to identify areas with the highest bauxite potential within the Sunrise Minerals' tenement portfolio. Drill data was assessed through spatial analysis of Al₂O₃, SiO₂, Fe₂O₃ contents and ratios and by checking the effectiveness of the holes drilled to test bauxite. Data compilation, validation, JORC exploration target estimation. Competent Person reporting

Referee: Cameron Switzer, Consultant Geologist

Whitehaven Coal

Ground Magnetic Surveys and Interpretation, Boggabri-Gunnedah District, NSW
(2010 - 2014)

Organisation and implementation of extensive high resolution ground magnetic surveys for Whitehaven Coal over several projects in the Boggabri-Gunnedah district. Integration of geological, drilling and geophysical data sets and interpretation of results. Identification and delineation of faults, tuff units and sills.

Referee: Mark Dawson, Group Geologist

Mineral Resources Authority PNG (World Bank Project Exploration Data Base and Compilation)

Open File Exploration Data Compilation and Provision of GIS, PNG
(2014 - 2015)

This was a follow up project to Terra Search successful World Bank project in Papua New Guinea (2002-2006). Dr Beams was Team Leader. This project continued the compilation of digital data sets across PNG. particularly of existing geochemistry from the Open File data resource lodged with the MRA by explorers. The project employed 7 PNG national geologists, and trained in the order of 20 MRA staff. Work was undertaken at the MRA in Port Moresby, PNG.

Referee: Arnold Lakamanga Manager - GIS Mineral Information; Nathan Mossou, Director Geological Survey, PNG.

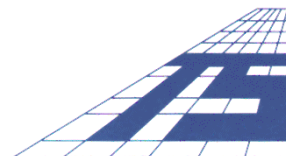
Natural Resources Exploration (NRE Pty Ltd)

Development of Exploration Property Portfolio & Implementation of Exploration Program, NT & Qld
(2009 - 2013)

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Assistance with assembly of large package of exploration tenements across Queensland and Northern Territory across a range of geological terranes and commodities. Organize exploration permit applications, tenement management and implementation of exploration programs. Regional assessment using geophysical interpretation of aeromagnetics, Aster and aero-radiometrics. Assessment via helicopter reconnaissance/prospecting of large tenement package in eastern NT for phosphate, base metals and gold. Follow up geophysical surveys, ground magnetics, SAM, IP and soil surveys over prospective areas at Jervis North, Carrara and Mittebah.

Referee: Graeme Maus, Special Projects Manager (Global); Directors: Askok Gupta, Ahmet Gupta, GS Gupta

Cudeco Limited

Rocklands Copper, Cloncurry District, North West Queensland
(2006-2009)

Geological consulting and management of the interpretation of the geology, the methodology of logging, supply of geological staff and data management services. This is an exciting copper/cobalt/gold project in the Eastern Succession of the Mt Isa Block. Dr Beams' involvement has been instrumental in the understanding of the ore body and the day to day management of the data for the project. Geological relations and discovery history has been presented in papers by Dr Simon Beams at SGA, Townsville, July, 2009; NQEM, Townsville, June, 2009; Australian Earth Sciences Convention, Perth, 2008 and James Cook University Breccia Conference, Townsville, 2007. Competent Person and ASX reporting

Referee: Wayne McCrae Managing Director

SmartTrans Holdings Limited

Mt Mackenzie
(1997 - 2007)

The Mt Mackenzie system was a known high sulphidation epithermal system in the Connors range region of Eastern Queensland. Principal Geologist Simon Beams managed all aspects of the exploration for Coolgardie Gold/SmartTrans. Evaluation of existing data identified large gaps in the geological knowledge of the system despite over 600 holes having been drilled in the area. The system was reinterpreted using existing data, relogging of chips and core and re-evaluation of existing geophysics. The first drilling program intersected 24m @ 2.5g/t some 400m from previously known mineralisation. Further geophysics confirmed the existence of one of the largest high sulphidation systems in Eastern Australia. The budget for this project to date has been \$5 million. In 2005 and 2006 a deep drilling program led to the exciting development of significant polymetallic mineralization being encountered under cover 1 km away from outcropping mineralization. Results at the Instinct Prospect include 8m @ 5 g/t Au.

Referee: Jim Laurie, Exploration Director, SmartTrans Holdings Limited

Diatreme Resources Limited

Queensland Projects: Clermont, Tick Hill, Langdon River, Iron Hurst, Nymbool, Pyramid, Mt. Cannindah, Yarrol, SA Project: Anabama

Exploration Portfolio
(2005 - ongoing)

Program management. Implementation of exploration programs over a broad based project portfolio throughout Queensland and northern NSW. Several commodities including gold, copper and diamonds are involved. Ground magnetometer surveys and major drilling programs have been completed. Including supervision of reverse drill circulate program totalling 10,000m

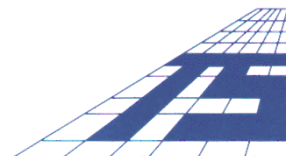
SmartTrans Holdings Limited

Connors Arch/Waitara
(1997 - 2003)

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Exploration for epithermal and porphyry related gold and copper gold systems throughout the Connors Arch in central Queensland. Evaluation of the Waitara Porphyry Copper prospect for Central Queensland Resources, as JV partner for SmartTrans. Discovery of 366 Vein system. Evaluation of Waitara epithermal gold Six Mile Creek, Clive Creek and Aurora Flats for SmartTrans. Many other Prospects and tenements have been evaluated and either relinquished or Joint Ventured. Reporting to the mines department and joint venture partners was handled by Dr Beams during this time.

Referee: Jim Laurie, Exploration Director, SmartTrans and Rhod Grivas, Exploration Director, Central Queensland Resources

Referee: Jim Laurie, Exploration Director, SmartTrans Holdings Limited

Thalanga Copper Mines

Highway Reward / Thalanga - Charters Towers district
(2002 - 2006)

Management and reporting of all exploration activity including drill programs, on TCM's tenements in Charters Towers district. Preparation of data rooms for impending sale of Highway Reward and Thalanga.

Referee: Kevin Smith, Chief Executive Officer

SMC Gold Limited

Rishton Mine Corridor Exploration - Charters Towers district
(2002 - 2005)

Ongoing support and consulting to SMC on their exploration strategy. Evaluation of potential within the Mine Corridor led to recommendation and implementation of ground magnetic survey. Data capture and management and eventual custodian role for SMC Resources, Rishton Mine Corridor data.

Referee: Rob Kidd, Managing Director, SMC Gold Limited

Central Queensland Resources

Uklaunda and Mt Flora areas, Drummond Basin and Central Queensland
(2001 - 2002)

Evaluation, management and reporting of drill program at Mt Flora and preparation of Information Memorandum on Mt Flora and Uklaunda.

Referee: Rhod Grivas, Exploration Director, Central Queensland Resources

Garimperos

(2002 - 2007)

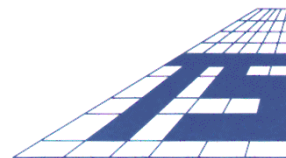
Terra Search in 2002 acquired, at the request of the receivers, Garimperos Pty Ltd, a management company to oversee exploration in New South Wales and South Australia of \$1 million of funds for a trust called Base Metals Exploration. This includes the management of tenements and the evaluation of the exploration potential of several areas. A 2004 drilling program on the Anabama project in South Australia intersected significant copper mineralisation. Drilling at Attunga, NSW intersected copper and tungsten mineralisation.

Reference: Bill Foxall, Manager Huntley Group

World Bank Project Exploration Data Base and Compilation, PNG

Open File Exploration Data Compilation and Provision of GIS, PNG
(2002 - 2006)

In 2002 Terra Search successfully bid for a World Bank project in Papua New Guinea. Dr Beams was Joint Team Leader with fellow Terra Search Director David Jenkins. This project is part of the Institutional Strengthening of the Mining Sector. The project is the development and installation of a Digital Geological Information system for the Department of



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Mining. This includes the installation of software developed by Terra Search and the integration with other software packages, and the training of PNG staff in the use of the system. A major component of the system is to put together digital data sets for the country, particularly of existing geochemistry from the Open File data resource lodged with the Department of Mining by explorers. Terra Search has also put together GIS layers such as drainage and catalogued other existing layers such as geology. It is a 3 year, \$2 million project employing up to 10 PNG nationals, as well as management staff from Australia, with all the work being undertaken in PNG.

Referee: Dr Graeme Hancock, World Bank Coordinator

Queensland Department Employment, Economic Development & Innovation: State-wide Compilation

Open File Exploration Data Compilation and Provision of GIS, Queensland

(2006 – 2012)

Compilation of exploration data from across mineral provinces of the state. 4 year project totalling \$1.8million. Dr Beams is Joint Team Leader with fellow Terra Search Manager Debbie Lethbridge. Initial regions are Mt Isa, Rawdon Corridor, Drummond and Hodgkinson Basin.

Referee: David Mason, Director Geological Survey Queensland. Joseph Tang, Program Managers.

NSW Department of Mineral Resources: State-wide Compilation

(NSW Statewide 1995 – 2001, Nymagee Project 2012)

Open File Exploration Data Compilation and Provision of GIS, NSW

Compilation of stream sediment and drill data across the state. Total 278,000 stream sediments, and 46,200 drillholes. Dr Beams was Joint Team Leader with fellow Terra Search Director Richard Lesh.

Referee: Peter Lewis, Kevin Capnerhurst Program Managers.

Geological Survey of Victoria: State-wide Compilation

(Vic Statewide 1996 – 2002; Stavely Project 2016)

Open File Exploration Data Compilation and Provision of GIS, Victoria

Compilation of stream sediment, soil and drill data across the state. Total 382,208 stream sediments, 73,218 soil samples and 8296 drillholes. Dr Beams was Joint Team Leader with fellow Terra Search Director Richard Lesh

Referee: Roger Buckley, Program Manager(1996-2002).

Cameron Cairns (2018) Manager Minerals Geoscience | Energy and Earth Resources Department of Economic Development, Jobs, Transport and Resources

NT Department Mines and Energy/Geoscience Australia: Tanami and Various Other NT Mineral Provinces

(NT Statewide 1996 – 2002, Macarthur Project 2018)

Open File Exploration Data Compilation and Provision of GIS, Tanami, Macarthur Basin, Pine Creek, Victoria River Basin, NT

Compilation of stream sediment, and drill data across the Tanami and other mineral Provinces in NT. Dr Beams was Joint Team Leader with fellow Terra Search Director David Jenkins. Total 79,200 stream sediments, 53,900 soil samples and 9400 drillholes, Macarthur Project 2018

Referee: Program Manager.

Australian Mineral Industry Research Association (AMIRA) Projects P413 Mt Isa and P413A Eastern Queensland

(1993 – 1998)

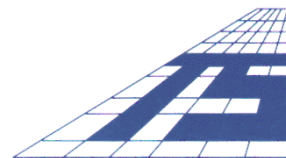
Open File Exploration Data Compilation and Provision of GIS, Mt Isa Eastern Queensland

Compilation of exploration data from Mt Isa and Eastern Queensland and development of Explorer 3 Relational Data Base

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Management System and methodology of data capture. Dr Beams was Team Leader 15 to 21 sponsor companies, Project deliverables on-time and on-budget.
Referee: Research Coordinators David Tucker, Alan Goode.

Coolgardie Gold

(1993 - 2005)

North West Queensland Base Metal Exploration

Exploration for gold/base metals throughout the Mt Isa Western Succession. Management of exploration program including exploration program planning, budgeting, reporting, accounting, personnel and contracts. This has included the major Riversleigh Base metal project in Mt Isa.

The Riversleigh project had a total budget of \$4 million and resulted in the discovery of the Grevillea Zn-Pb-Ag massive sulphide system. Dr Beams together with Terra Search project Geologist David Jenkins formulated the program which led to the discovery of the prospect using a combination of geology and geochemistry. Further evaluation used a wide range of geological, geochemical and geophysical techniques. The system is a large sediment hosted sulphide system with high-grade zones of Zn-Pb-Ag. Drilling in 2002 resulted in the discovery of a major sulphidic basin. Geological relations and discovery history has been published in AUSIMM 1990 Monograph in a paper by Principal Geologists Dr Simon Beams and David Jenkins.

Referee: Jim Laurie, Exploration Director, SmartTrans Holdings Limited

Mt Leyshon Gold Mines

Puddler Creek and Puzzler areas Breccia and Intrusive related Gold - Charters Towers district

(1988 - 1993)

Exploration, management and drill testing by Dr Beams of gold vein and breccia systems around Mt Leyshon and in the Puzzler area. Total exploration budgets were in the order of \$1-2 million. Several new breccia and vein systems were discovered and evaluated. Data management role to compile all the existing data over Mt Leyshon's tenements. Production of major exploration status report.

Referee: Jim Morrison, Exploration Manager, Mt Leyshon

City Resources

North Queensland Gold and Base Metal Exploration

(1987 - 1989)

Exploration for base metals/gold in the Charters Towers region of North Queensland. Management of exploration program including exploration program planning, budgeting, reporting, accounting, personnel and contracts. The project had a total budget of \$3 million and resulted in the discovery and delineation of the Reward massive sulphide pipe. This is a blind Cu/Au deposit discovered using a combination of RAB drilling, geochemistry, geology and geophysics. This deposit was mined in the period 1995-2004. During the course of City Resources involvement Dr Beams had overall program management including a computing and drafting team which handled all data management and plotting, account allocation and contract management. All reporting requirements to joint venture partners and the Mines Department were also handled by Dr Beams. Geological relations and discovery history has been presented in papers by Principal Geologist Dr Simon Beams at NQ Gold, Townsville, 1989 and International Geochemistry and Exploration Symposium IGES, Townsville, 1995. AUSIMM monograph 1990.

Reference: Jim Laurie, Denis O'Neill, Exploration Managers, CRL

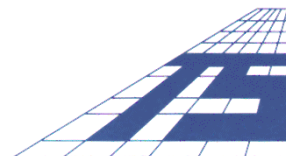
Dalrymple Resources

North Queensland Gold and Base Metal Exploration

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Simon Beams - Curriculum Vitae 2018

(1988 - 1998)

Exploration for gold/base metals throughout North Queensland. Dr Beams had overall management of exploration program including exploration program planning, budgeting, reporting, accounting, personnel and contracts. This included the evaluation of over 10 separate tenements in the Drummond, Ravenswood, and Mt Isa and Hodgkinson regions. The project had a total budget of \$4 million and resulted in the discovery of the Mt Dalrymple Breccia hosted gold system in the North Drummond Basin. Compiling existing data from the region and identifying areas with insufficient follow-up discovered this deposit where visible gold occurred at surface. A combination of geology and geochemistry then resulted in the intersection of a mineralised breccia system with the best intersection to date being 4m @ 18g/t. Many other areas were evaluated and either relinquished or Joint Ventured. All reporting to the mines department was handled by Dr Beams and Terra Search during this time.

Reference: Marcus Harris, Exploration Director, Dalrymple Resources

Esso Minerals

(1983 - 1987) North Queensland

Exploration for gold/base metals throughout North Queensland. Dr Beams had overall management of exploration program including exploration program planning, budgeting, reporting, accounting, personnel and contracts. This included the evaluation of over 20 separate tenements in the Mt Windsor Volcanic block for gold and base metals. Including extensive geological mapping, geochemical and geophysical surveys and drill testing. Other areas also examined include Ravenswood block gold vein and breccia targets, Mt Isa Block base metals. The projects had a total budget of \$1-2 million.

Esso Minerals

(1980 - 1983) Lachlan Fold Belt, NSW

Exploration for gold/base metals in the submarine volcanic terrane of the Cooma-Bredbo region, southern NSW. Volcanic hosted base metal sulphide targets. Dr Beams had overall management of exploration program including exploration program planning, budgeting, reporting, accounting, personnel and contracts. This included the evaluation of over 6 separate tenements in for gold and base metals. Including extensive geological mapping, geochemical and geophysical surveys and drill testing. The projects had a total budget of \$1 million.

La Trobe University , Melbourne, Vic

(1977 - 1980) South East Lachlan Fold Belt, NSW & Victoria

Extensive field and laboratory research on granites and other igneous rocks of the south east Lachlan Fold Belt. (PhD Thesis)

Forests Commission of NSW, Victoria Forestry

(1977 - 1979) Eden , Cann River,Orbost Forests Districts , Lachlan Fold Belt, NSW & Victoria

Extensive field mapping granites and other igneous rocks of the state forests of the region. Reports produced on geology and soils and geological reasons for Dieback.

Afmeco Pty Ltd

(1976) Clarke River Basin, North Queensland

Geologist involved in Uranium exploration at Clarke River. Geological mapping, radiometric surveys, drill logging.

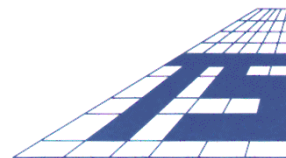
Australian National University, Canberra, ACT

(1974 - 1975) South East Lachlan Fold Belt, NSW

Townsville
PO Box 981, Hyde Park QLD 4812
21 Keane Street, Currajong QLD 4812
Phone: (07) 4728 6851 Fax: (07) 4728 6854

Perth
PO Box 2016, Carlisle North WA 6101
12/120 Briggs Street, Welshpool WA 6106
Phone: (08) 9472 8546 Fax: (08) 9472 8548

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Extensive field and laboratory research on granites and other igneous rocks of the Wyndham-Whipstick area.(Honours Thesis)

Major Publications

Beams, S.D. (1995) .ed. Mineral deposits of North east Queensland: Geology and Geochemistry. EGRU Publication 52. James Cook University of North Queensland pp277.

Beams, S.D. (1998) .ed. Economic Geology of North east Queensland, the 1998 Perspective. Mineral deposits of North east Queensland: Geological Society of Australia Inc. pp248.

Beams, S.D., 1998. From Granites to Mineral exploration. In: The Bruce Chappell Symposium: Granites, Island Arcs, The Mantle and Ore Deposits. Abstract Volume (Ed Wyborn,L) pp21.AGSO Record 1998/33.

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Beams, S.D. (2009) .ed. North Queensland, Gold and Base Metals Field Trip. Excursion Guide, Selected Papers and Maps. SGA2009, EGRU. James Cook University of North Queensland, pp277.

Beams S.D. (2009) Geology and Mineralisation of the Rocklands Copper-Cobalt-Gold Deposits, Cloncurry District, North West Queensland, Australia. Society of Geology as Applied to Mineral Deposits, SGA 2009, Townsville, July, 2009.

Beams, S.D. & Jenkins, D.R., 1995. Regional exploration geochemistry and the regolith of Northeast Queensland. In: Mineral Deposits of Northeast Queensland: Geology and Geochemistry (Ed. S.D. Beams), pp.33-53. EGRU Contribution 52. James Cook University.

Beams, S.D., Laurie J.P. & O'Neill D.M. (1990) .Reward polymetallic sulphide deposit In Hughes F.E. ed. Geology of the Mineral Deposits of Australia and Papua New Guinea, pp 1539-1543. (The Australasian Institute of Mining and Metallurgy, Melbourne.)

Beams, S.D., Laing, W.P. & O'Neill D.M., 1989. The exploration history and geology of the polymetallic Reward deposit, Mt Windsor Volcanic Belt, North Queensland: North Queensland Gold '89 Conference, Townsville, Queensland, April 1989, Proc., pp.95-102.Australasian Institute of Mining and Metallurgy.

Berry, R.F., Huston, D.L., Stolz, A.J., Hill, A.P., Beams, S.D., Kuronen, U. & Taube, A., 1992. Stratigraphy, structure and volcanic hosted mineralisation of the Mt Windsor Subprovince, North Queensland, Australia. Econ. Geol. V.87, 739-763.

Hutton, L.J., Beams, S.D. & Rapkins, R.J (1996) Charters Towers 100,000 Geology Map. Queensland Department of Mines and Energy.

Jenkins, D.R., Laurie, J.P. and Beams S.D. (1998). Grevillea zinc-lead-silver deposit. In: Geology of Australia and Papua New Guinea Mineral Deposits (Eds, D.A.Berkman and D.H.Mackenzie) pp753-758. (The Australasian Institute of Mining and Metallurgy, Melbourne.)

Morrison, G.W. & Beams, S.D., 1995. Geological setting and mineralization style of ore deposits of Northeast Queensland. In Mineral Deposits of Northeast Queensland: Geology and Geochemistry (Ed. S.D. Beams), pp.1-32. EGRU Contribution 52. James Cook University.

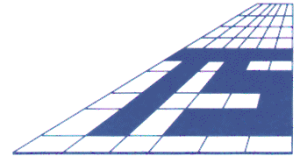
Townsville
PO Box 981, Hyde Park QLD 4812
21 Keane Street, Currajong QLD 4812
Phone: (07) 4728 6851 Fax: (07) 4728 6854

Perth
PO Box 2016, Carlisle North WA 6101
12/120 Briggs Street, Welshpool WA 6106
Phone: (08) 9472 8546 Fax: (08) 9472 8548

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Extended bibliography includes numerous selected research publications, reports and abstracts on exploration case histories, geochemistry, mineralisation styles and exploration data management.

Townsville
PO Box 981, Hyde Park QLD 4812
21 Keane Street, Currajong QLD 4812
Phone: (07) 4728 6851 Fax: (07) 4728 6854

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PO Box 2016, Carlisle North WA 6101
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